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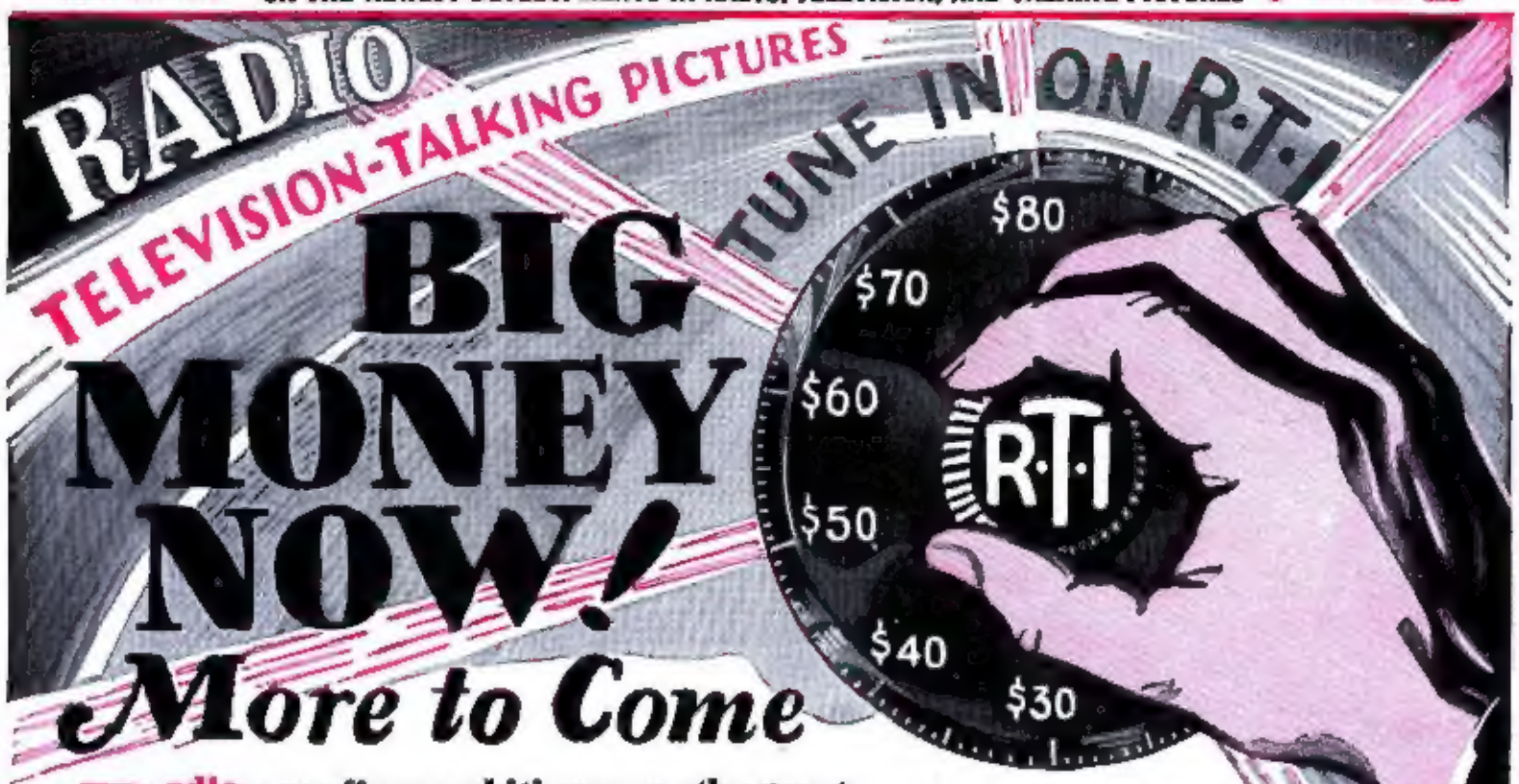

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ON THE COVER

this month from "The Radium Master" by Jim Vanny, our young explorers are held in the iron grip of the merciless wheeled-robot, while the masked Emperor of Urania transmits through his strange equipment the orders that will seal their doom.

NEXT MONTH

IN 20,000 A.D.!, by Nathan Schachner and Arthur L. Zagat. The mere mention of words cannot convey truly the thrill that the editors received when they read this marvelous time-traveling story. Imagine yourself suddenly rushed through time and finding yourself thrown into the year 20,000 A.D. Into a world of which you knew nothing, and one that even your most fantastic dreams cannot picture? Here is a startling story; the adventures of a country boy in the stirring events of a great civilization.

THE WAR LORD OF VENUS, by Frank Bridge. It has been said that Venus is probably in the same stage of its evolution as the earth was fifty million years ago. What a fascinating subject for a story is the experiences of interplanetary explorers on such a strange, young world! The possibilities for adventures are endless, and our author makes use of them to construct a fast-moving, breath-taking mystery story—a full length novel!

THE TORPEDO TERROR, by Edsel Newton. It has already been acknowledged that it is possible to send an airplane into the air and guide it by radio controls without the need of a pilot. The immense importance of this in a war in the air cannot be overestimated. For by means of radio controls it will be possible for a nation to send thousands upon thousands of planes laden with high explosives over the enemy lines. But "The Torpedo Terror" is not a war story, in fact it is the working out of a great mystery and the saving of the world from a terrible disaster.

A RESCUE IN SPACE, by Lowell Howard Morrow. This story is the third prize winner of the AIR WONDER Cover Contest. A desperate drama is going on in the vast reaches of interplanetary space! A fierce battle and then a chase across millions of miles!

AND OTHERS

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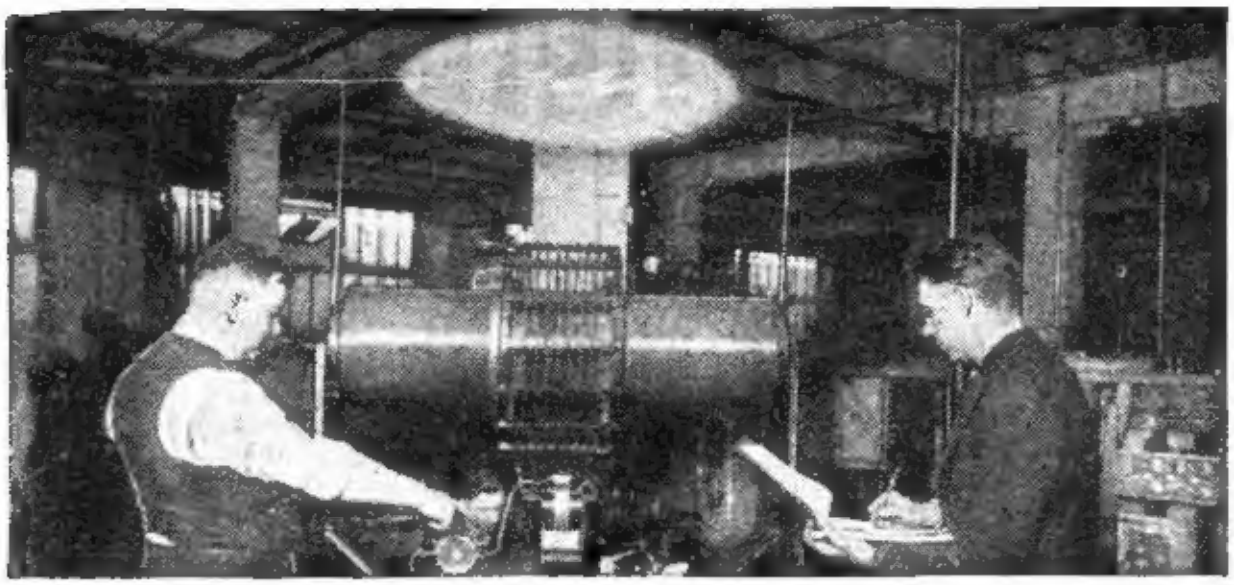

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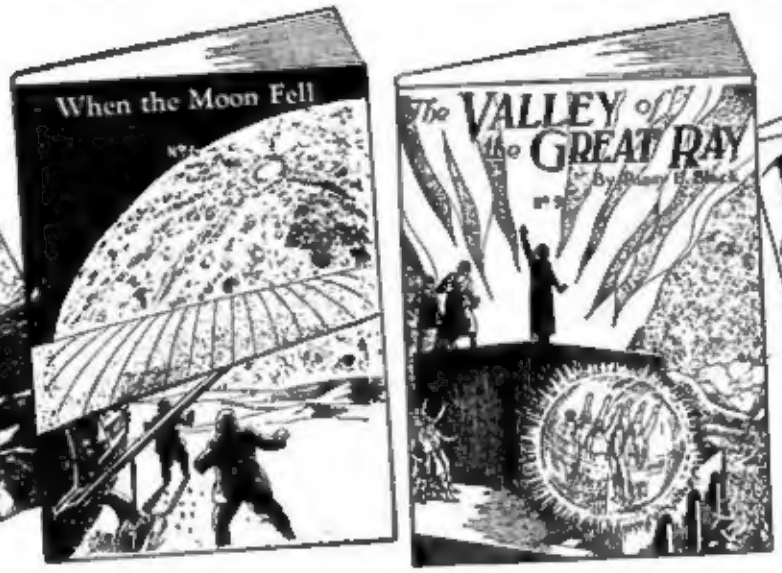

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These nationally-known educators pass upon the scientific principles of all stories.

WONDERS OF MEMORY

By HUGO GERNSBACK

IT is often the thing nearest to us that is most difficult for us to see or to analyze.

If we could erase from our minds the fact that we have a memory and try to conceive of such a thing, we would find it most difficult to believe that the tricks and the amazing wonders which our own mind produces every day did not originate from the pen of some science fiction writer.

Of all the functions of the human body, the mechanism of memory is perhaps the most incredible it is, as a matter of fact, in many ways almost unbelievable.

When one comes to realize that the human mind is capable of storing millions of different facts and occurrences, which can be recalled at will, practically at any time, we are faced with something that borders almost on the supernatural.

It is well known that the human body undergoes complete changes every few years, and that, at the end of ten years, nothing of the original body remains. All the original atoms which constitute tissue, bones, nerves, brain, etc., have been replaced systematically every few years; new molecules have taken the place of the old structure. This disproves an old theory of memory; that certain events are engraved upon certain cells in the human brain, just as a voice or song on a phonograph record is indelibly engraved upon the disc.

There have, of course, been many theories as to the mechanics of memory; but it is safe to say that none so far have met all the known facts. For instance, a curious fact is that as we grow older our memory becomes worse on recalling occurrences which date back only a few years, than on recalling the experiences of early childhood. A man forty years old, for instance, finds it quite difficult to remember certain occurrences of ten or fifteen years back, but childish memories stand out clear and distinct. Of course, the theory of this matter is that the early sensations are so much more powerful that they leave a more indelible impression, whereas later events have been crowded out.

This may be a good answer, but it does not account for all of the phenomena. The truth is that memory is a most complicated phenomenon—so complex that a thousand volumes could easily be written about it without beginning to cover it thoroughly.

The average layman might think that memory is purely a mental impression. This is not a fact, for memory is distinctly associated with all of the five senses. For instance, a certain odor may bring back a train of memories which were latent for years; the sight of a certain scene may restore the recollection of some long-forgotten happening; and the taste of a certain food or liquid may resurrect associations that were experienced twenty or thirty years ago. The same is true of all of the other senses. From this it can be seen how truly complex the memory mechanism really is.

Nor is memory subject to the will of an individual at all times. Very often we torture ourselves to think of a certain name or a certain fact, and it may require hours or days of tremendous mental effort to recall the mental impression that was made days, months or years past. Often, we are unsuccessful and our memory fails us, for the time being and, perhaps, for all time.

A new theory of our memory, recently advanced and, from a scientific viewpoint, highly interesting, has been promulgated by Dr. George W. Crile, director of a Cleveland clinic.

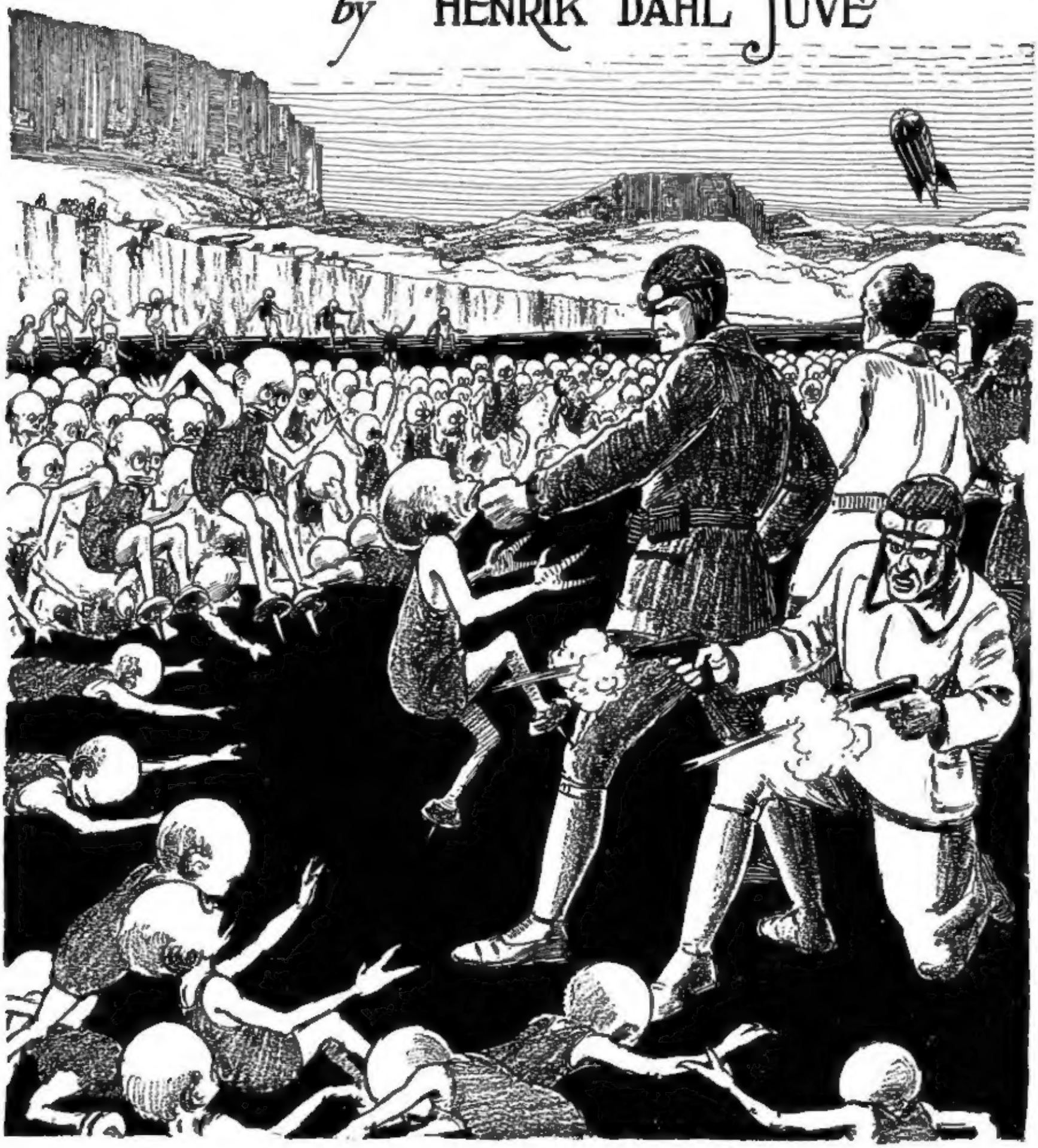
"A valid theory of memory," he said, "must account for the persistence of memory throughout life. It must provide a separate mechanism for each individual memory, interpret subconscious memory and dreams, provide for the temporary loss of memory, show why memory varies under differing conditions, and meet many other requirements." Crile's theory is that the entire brain and nervous system owe their structure and form to electric organization.

"In turn the brain cells, through oxidization, create electric energy and possibly a photoelectric effect," Dr. Crile continued: "That specific function of the nervous system which we call memory is due to the presence in the brain of specific conducting pathways of fibers, formed of potassium, sodium, and possibly other salts, with lipoids, which are projected from the brain cells.

"The metal ions in these pathways are deposited by a process of replacement similar to the replacement of sodium ions in glass in Millikan's experiment. These pathways are produced by the electrical current, created by sense stimuli and carried to the cells through the afferent nerves. Every reproduction of the creating stimulus reactivates the pathway which that stimulus originally produced; thus producing memory. This theory is supported by various histological, experimental and clinical facts."

The Martian Revenge

by HENRIK DAHL JUVE



(*Illustration by Paul*)

Masters fired desperately, but with slow deliberation. But it was hopeless to stem the tide that rolled in upon them in relentless fury.

THE MARTIAN REVENGE

By the Author of "The Vanishing Fleet," "The Sky Maniac," etc.

MR. MASTERS sat in his library studying a mass of blue-prints, still dressed in the high boots and rough clothes he had been wearing while working in the shops.

There was a timid knock on the door. With a quick motion of his left hand fingers that was characteristic of him he brushed his sandy hair back.

"Come in," he called. There was a note of command in his voice.

Somo, his Japanese servant, pushed the door open.

"A man to see you," he announced. "Dr. Grigson from Columbia University."

"Send him right up, Somo. I'm glad he's come."

The Oriental bowed himself out with all the ceremonious form of his native land, much to the impatience of his master. In a few moments he ushered Dr. Grigson into the room. Dr. Masters arose to shake hands with his old-time friend and colleague. Grigson was a short, thin man of middle age, rather nervous and meticulously dressed. What he lacked of the robust and dynamic personality of Masters he attempted to compensate for with austere clothes and precise manners.

"Well, well! I'm certainly glad to see you, Grigson. I suppose you've come to remonstrate with me over the folly of my plans. But sit down and make yourself at home. How has the rheumatism been of late?"

Dr. Grigson selected a chair and sat down. Even his sitting was done with precision.

"The winter has been a trifle severe with me, thank you. But to the point. I did come to urge you to forego the folly you contemplate. I have pursued the scientific journals in a vain attempt to discover the principle of your vehicle, but I understand you have kept the details a secret. But granted that the contrivance does fly and you succeed in reaching Mars, there is no knowledge of conditions there. You proceed totally unprepared for the exigencies that might arise. If you had some idea of what you might encounter, you could arm yourself with the proper equipment. I fear for your safety."

Masters laughed good-naturedly. "Don't worry about me! Isn't all scientific adventure more or less shrouded in the unknown? Didn't Columbus sail into the unknown, and didn't he persist, even though it was commonly accepted that the Atlantic was infested by reptiles? I am going, although I appreciate your interest."

"But the dangers you might encounter en route!" the nervous man persisted. "There are meteors and other small bodies that may cause trouble if not disaster. What do you know of interplanetary conditions?"

"That's exactly what I want to find out! I wish to bring back to science a full report of what conditions actually prevail and also the nature of the surface of Mars.

HENRIK DAHL JUVE

WE can always depend on this author to furnish us with an unusual story, and in this interplanetary adventure extraordinary he has indeed fulfilled our expectations.

He has shown in a really vivid manner some of the perils that attend communication with a strange civilization: and he has illustrated the horrors that might follow if our interplanetary explorers were to injure or offend or outrage the race of the planet to which they have gone.

It is unfortunately true that wherever the white man has gone on this earth he has defiled and destroyed the culture of the people he has conquered. But we may find that any attempt to do that on a strange planet would meet with instant retaliation, and our explorers might then suffer the horrible revenge of an outraged nation.

"Now, you expressed doubt as to the practicability of my invention. I flew it on a trial flight a week ago and found that it performed almost perfectly. We've been making some minor changes that we found necessary, and we hope to leave the earth in about four days. Here, I'll show you the secret drawings and explain them to you."

There followed a lengthy discussion over the prints. Dr. Masters went into mathematics that few men could understand and as he talked Dr. Grigson became more and more nervous. His eyes glowed with excitement as it dawned on him that the scheme was really practicable. And he had in the back of his mind the knowledge that Masters had already built a ship.

Masters showed how he had applied Einstein's electro-magnetic theories to gravitation by changing the polarity of the ship. This caused the naturally attractive force of the earth's gravity to repel the space flyer, as like poles of magnets repel each other. Dr. Masters had devised a means for changing the gravitational polarity of the ship by insulating it from its surroundings and charging it with a force which he called *gravopotential.*

"This *gravopotential* is stored as electro-magnetic energy in the ship and overcomes the gravitational attraction of the Earth. The additional energy that the ship has gives it its flight speed," Masters explained.

Grigson Decides

THE front door slammed and someone came rapidly and noisily up the stairs. The study door burst open and a robust young man popped into the room. He stopped abruptly when he saw Grigson.

"Oh, I beg your pardon, Dad. I didn't know you

had company."

"That's all right, Dick, come in! I want you to meet Dr. Grigson. He and I were room-mates at college."

Dick advanced with easy confidence. He was typically "collegiate" in the latest fashion and faddisms of the campus. As he shook hands with the little professor, his every move indicated buoyant life. One would judge that he could lead the students on the wildest larks of deviltry

"Listen, Dad!" he said when the formalities were over. "I want to go with you to Mars!"

"What put that notion into your head all of a sudden—some girl?"

"Well, no—yes. Say, Helen said that if I went I might get into the movies. And—well, Helen and I want to go, Dad."

"A woman along! Preposterous! Absolutely not! And you: I've had my hands full getting you out of one scrape after another. This is too serious a venture to handicap with your presence—and a woman! No, I'll leave you here for the other professors to worry about!"

"But dad—"

"Enough! You'll stay home—that's settled." There was finality in his voice.

Dick left the study deep in thought. When the door closed behind him, Masters again turned to Grigson.

"Why can't *you* accompany us?" he asked abruptly.

"Good heavens, no!" Grigson was almost horrified at the idea.

"Yes, you can! Just think what it will mean to you if you do go. You'll be one of the big men of the age! Your books will be best sellers and you'll be in demand everywhere."

It was the clinching argument, and Masters knew it. He wanted the little man along because he was one of the few men who could understand the principle of the ship and also because he needed scientific assistance. His crew, composed for the most part of reckless adventurers whom he had trained in their specific duties, was of no value to him from the technical point of view. He did not wish to make all of the observations alone. And knowing something of Dr. Grigson's secret desire for fame, he was playing that card to the utmost.

Dr. Grigson paced the room restlessly, torn this way and that by conflicting emotions. Finally the possibilities for a glorious future overpowered his timidity.

"I'll go!" he said suddenly.

Into the Unknown

SEVERAL trial flights had been made and the ship tested and adjusted. Dick had accompanied them on these flights, but his persistent and ingenious pleas had all failed to influence his father "No!" was the inevitable answer.

On the fifth of June all was in readiness. The great ship, a sphere of black insulating material over a steel shell, rested in a field on the outskirts of Seattle. A huge crowd had gathered and it was only with difficulty that the police kept the mob from crushing in against the ship. Everyone gazed in awe at the two-hundred foot sphere which had the appearance of a black planet with the little crater-like openings which were port-holes. Half way up the shell a circle of four-inch guns protruded grimly.

The two professors and the crew were lined up for a last shot by the press and newsreel photographers, while reporters clamored for a last word. At last the crew climbed up the slight incline of the gangplank and one by one disappeared through the door near the bottom of the monster.

"Well, that's over with," said Masters. Then one of the men swung the door to and turned the crank that screwed it into the hull like the breech of a naval gun. It now sealed the opening so that it was air tight. A similar door sealed the lock chamber from the rest of the ship.

Masters looked at Dr. Grigson. His friend was pale, but managed to retain his composure.

"Perhaps after all you wish to stay behind," Masters suggested. He felt a pang of regret that he had almost forced this timid man to go on such a wild adventure.

"No—I—I think that it is better for me to go."

"To your posts!" Masters ordered his men.

The men scattered to their positions, some of them, including the pilots, climbing to the upper decks. Masters and Grigson remained in the engine room for a time as the ship was being started. There was a bark and then a roar from each of the two larger gunpowder turbines and a whine that rose to high pitch as the generators picked up to speed. Because of the limited supply of oxygen-producing materials that could be carried, Masters had invented these powder turbines. The gunpowder was fed into the combustion chamber where it burned, and the hot gases passed through the nozzles of the turbine to the blades where they expanded, finally exhausting into the almost perfect vacuum of inter-stellar space. Masters had worked for years to perfect an alloy that could withstand the high temperature of the burning powder.

This lower deck also contained the four huge vacuum tubes which changed the electrical energy into *gravopotential*. These tubes were about ten feet in diameter and twelve feet high. They were built like seven element tubes with the addition of x-ray and cosmic ray emitters, mounted inside. They were protected by a partition of heavy steel bars. Under the floor were the bomb racks with the controls and sighting telescopes and scales mounted above the floor near the wall opposite the tubes. Inside the lock chamber were two machine guns which covered the outer door. The four-inch guns were mounted on the second deck, each extending through an airtight fitting in the hull.

The ship listed slightly and Masters looked at the people outside. He was amused to see them scatter in wild confusion, evidently fearing that the monster might roll over them. They did not know that enough *gravopotential* had already been stored to make the ship light as a feather.

In another moment the space flyer had left the ground. The upward acceleration, because of the continued storing of *gravopotential*, increased rapidly until it reached the limit of thirty-two feet per second when the pilot stopped the two larger turbines. They were now flying as a freely falling body, except that they were falling away from the earth.

Already the Earth was so far below them that it appeared to be a huge disk. Masters pointed out the governor position on the small direct current machine to Grigson.

"We are now up in rarefied air and the turbine is running at increased efficiency because the exhaust doesn't have atmospheric back pressure to overcome. But come, we'd better go up into the control room."

Now that the ship was fully charged with *gravopotential* they found it necessary to drag themselves about, for there was no gravity to hold them to the floor. It was a queer, helpless feeling that they were never to become fully accustomed to. They followed the handrails, dragging themselves up the stairs to the control room where the shift pilots were seated before the controls and gauges. All the machinery was controlled from this board so that in case of necessity, the ship could be handled by one man. There were six pilots, permitting two men to be on duty at all times. This was also true of the engineers. The rest of the fliers consisted of two electricians, four gunners, an Amalgamated Press representative, a male stenographer and the cook.

Masters scanned the gauges. Their speed was now slightly more than four miles per second and the gauge was climbing steadily toward the seven-mile-per-second limit. At the end of twenty minutes the speed had almost reached this, and the gauge was still rising, although almost imperceptibly. Masters had calculated that they would be able to cover about 604,000 miles per day of twenty-four terrestial hours. He had arranged his start at a time that would enable them to arrive at the orbit of Mars just when that planet would be at its point of nearest approach to the Earth, that is, 36,000,000 miles away. Since this near approach occurs only once in fifteen years, he considered himself fortunate in being able to grasp this opportunity to reduce their flying time to the least possible, which was slightly over fifty-nine days.

CHAPTER II

Nearing the Planet

THEY had now traveled forty-seven days through the black, intense cold of outer space. The gas thermometer on the night side of the craft recorded a temperature near absolute zero while that on the day side stood somewhat higher. Despite the outer cold, however, those on board were entirely comfortable, for Masters had devised a heating system of coiled pipe in one end of which a small amount of powder was burned. The other end opened into space.

They spent hours staring through smoked glasses at the sun. It was a great ball of fire with flames weaving off into space. So immense were the flames that it required hours of observation to detect that they were actually weaving and billowing. On one occasion, however, a stupendous explosion on the sun had driven great clouds of fire and debris 200,000 miles into space in less than ten minutes.

"Such a blast sweeping the Earth," Masters had said, "would in thirty seconds reduce the cities of the United States to a cloud of incandescent vapor, and in a few more seconds it would fuse the Earth itself into a shapeless lump."

It was a terrifying world of weird darkness set with blazing lights that seemed to emit no light except to the eyes of the observers. Even the sun seemed to give no light but appeared to be a rent in the black curtain of velvety space. The reckless adventurers comprising the crew were strangely silent. Many times Masters saw those off duty staring at the Earth, which was now only a bright spot in the distance.

They had reached a point four million miles from Mars where gravitation balanced; that is, the pull from Mars was equal to that of the Earth. It now became necessary to dissipate the *gravopotential* stored within the mass of the flyer so that they could allow themselves to be attracted by the pull of Mars.

Masters took a last observation to check their automatic instruments and then went to the pilots on duty.

"It is time to dissipate the *gravopotential* and bring the ship back to normal," he said.

He watched the men close switches to direct the discharge. The men continued this slow dissipation until they were some distance beyond the neutral point of gravitation, and the speed began to drop slightly. The pilot now short-circuited the energy through another switch. There was a loud crackling from the side of the ship where the dissipating plate was located, and they all went to watch it. A spectacular sight greeted them as the violet flame reached a hundred feet into space. Some of the metal was torn from the plate like the sputtering of an x-ray tube and the surface became pitted. Gradually the flame died down and finally ceased altogether. The ship was now subject to the attraction of the gravitation of Mars.

Those on board now turned their attention to the planet Mars. From their position it appeared to be about the size of the moon and it grew steadily in size as they approached. They could plainly see the pole caps and noticed that the one about the south pole was much smaller than the one at the northern extremity. This was due to the fact that Mars was having winter north of the equator. After some discussion, Masters and Grigson decided to land near the equator and learn something of conditions there before risking an encounter with a Martian winter.

There was something eerie about this world of mystery as they rushed majestically through space. As they drew nearer they could discern areas of mysterious brown and of intriguing blue, and a system of precisely straight lines or canals. The theories concerning these phenomena were discussed almost endlessly by the crew, but Masters seemed content to wait until they reached the planet. His attitude was one of indifference, "for," he said, "all our theories can't change whatever they are, and we'll soon be there." Instead, he occupied himself at making observations and writing extensive notes.

As they approached their destination, Dr. Grigson became more nervous. Masters watched him closely. He noticed that his friend was losing sleep and that he spent hours in restless pacing

"What's the trouble?" he asked.

There was a haunting fear in Grigson's eyes as he

turned to the captain.

"I have a distressing premonition of impending disaster," he shivered. "Ever since I decided to accompany you I have been obsessed by a conviction that I shall never return. Yet the urge to continue was stronger than the thought of danger."

"Nonsense!" Masters exploded with more assurance than he felt. "I have no such feeling. If one returns, we all return. If one remains, no doubt all of us will remain. Cheer up."

But Grigson would not cheer up. Masters went up to the top of the ship where his telescope was mounted. Again a feeling of guilt came over him. "Why," he accused himself, "did I force him to come?" Then he shrugged his heavy shoulders and went to work with his observations.

A Sudden Peril!

FIFTY-SIX days had elapsed since they started on their journey. Masters had been in the observatory and now he came down to the pilot-house.

"We are off our course by three seconds," he said. "We have seventy-one hours and sixteen minutes of flight before we reach the orbit of Mars. If we continue on this course we'll cross the orbit ahead of the planet. Discharge thirty-one and two-thirds pounds of powder through rudder rocket Number Eight. Have the rocket charged and fire it at thirteen and one-half minutes after three. That will put us back on our course."

The pilot issued orders and presently one of the crew telephoned that all was ready. The pilot watched the chronometer and at the exact time specified he touched a button. There was a loud roar and a cloud of fire and smoke shot out from the side of the ship. The craft trembled under the liberated forces.

Masters again went to his observatory to check the result of the rocket. Apparently the calculations had been correct, for he stood up from his computations and returned to the pilot-room, where he found Dr. Grigson.

"We are approaching very close," he said, in order to attract the interest of his nervous friend. "Come up to the observatory for a good look at the planet."

They went up to the top deck and trained the telescope upon the growing planet, which now dominated the heavens with its great bulk. They could see the continents and oceans quite plainly, although there was as yet no evidence of civilization for they were still nearly two million miles away.

For hours the two remained at the telescope eyepiece. At last they felt sure that they could distinguish several cities, but the roofs were of the same color as the land so they found it difficult to distinguish them.

Another twenty-four hours passed and the planet loomed huge and formidable. They could now see that there were many cities and towns built along the canals, and they could even distinguish boats floating on the water. That there was civilization on the planet seemed to cheer Grigson immensely, but still he could not rid himself of his premonition of disaster.

The hours slipped by, while they still maintained a speed of slightly less than seven miles per second. The time was at hand when they would have to check the speed or crash against the planet. Masters and Grigson confined themselves to the observatory where they made many careful observations and computations. Carefully they watched the time, and they checked their distance from Mars many times. At last Masters gave the order to charge the ship with *gravopotential*.

They heard the whine of the turbines in the engine room as they changed the polarity of the ship. Masters went down to the control room where he watched the speed indicator intently. The ship was now fully charged and the pilot shut off the turbines. Very slowly—so slowly that they had to watch for several minutes before they could detect the change—the speed decreased. As the minutes slipped by and the planet repelled them, the rate of negative acceleration began to show perceptibly. Masters watched this for a time and then went up to make another observation. When he returned his face was wrinkled by a worried frown. Something was amiss!

"We are being pushed out of our course by some other body," he said. "Discharge seven pounds of powder per minute continuously from rudder rocket Number Seven!" he ordered.

Presently, from one side of the ship, a roar began to be heard that continued with the monotonous persistence of a fog horn. The ship now seemed to be overcoming the force that had been driving it out of its course. Masters ordered sixteen pounds of powder discharged from a tube beside Number Seven. This was to force the ship back still more onto her original course.

Again Masters and Grigson took observations and exchanged glances of concern. The force that was pushing them aside was again increasing! They made several hasty calculations and then Masters caught up the telephone and called the pilot.

"Increase the amount of powder burned in Number Seven by one and one-sixteenth ounces per minute," he ordered

As the minutes slipped by the roar from without became louder and the ugly red light from the rocket flooded the port-hole windows on that side of the ship. The telephone rang. It was the head shift pilot.

"There's something wrong," he said. "We're losing speed too fast. Any orders?"

"No," said Masters. "I'll try to find out what the trouble is first."

The captain swung the telescope about in a wide sweep, searching the heavens carefully while Grigson looked out through the port-hole.

"I understand our difficulty!" Grigson said suddenly. "One of the moons of Mars is interfering with our calculations!"

"Correct!" Masters exclaimed. "Why didn't we think of that before! Let's see, we're about 4,000 miles from Mars, so that means that the moon Phobos is nearby. Can you see it?"

"I haven't seen it, but it should be over on this side—yes, here it is! We can barely avoid encountering it!"

The Crash!

THE crew had sensed that something was wrong and it was only the calm, calculating attitude of Masters that prevented a panic. He ordered less powder burned in the rudder tube so that the repellent force between the ship and the satellite might force the craft out of her course and around the moon. Phobos was rushing through space at nearly forty miles per minute to intercept them. They could all see the little moon now. It was like a huge cannon ball coming at them. Closer and closer they drew, until it seemed that a collision was inevitable.

"Charge all the rudder tubes to their full capacity!" Masters shouted sternly.

With the tubes loaded, they were ready to alter their course if necessary. They had stopped burning powder to hold their course against the repellent force of the satellite; and they were being pushed out of their way and slowed in speed faster than they had calculated. They were now close to the orbit and all were tense, awaiting orders from Masters.

Grigson, who had been calculating their course, finally straightened up. "We won't crash! We shall pass just ahead of the moon!" There were sighs of relief throughout the ship.

It was a matter of minutes until they crossed the orbit of the moon. They saw the little satellite rushing at them from the side, growing larger at an alarming rate. But they were out of its orbit and safe from collision!

Mars was repelling them and reducing their speed; the moon, which had closed in behind them, was also repelling them, but tending to drive them toward the planet. Their original calculations were upset. Masters and Grigson did some rapid figuring and then looked at each other gravely.

"At this rate we'll crash into Mars at about two hundred miles an hour," Masters spoke first.

The planet had grown until it loomed vast and formidable before them, getting larger and nearer with frightful speed. Something must be done, and done quickly.

"Perhaps we—" Masters began and then reached for the telephone. "Fire all the forward tubes at full capacity," he ordered the control room.

The men were all at their posts and tense with the strain. The pilot was evidently awaiting the order, for Masters had scarcely finished speaking before the forward tubes burst into a frightful roar. The pilot reported that the speed indicator was going down more rapidly now.

They looked out of the windows but they could see nothing except the flares of lurid red fire from the tubes and the clouds of black smoke that enveloped the ship. They were flying blindly.

Masters and Grigson went down to the control room to watch the gauges, for they could do nothing in the smoke and flame-filled observatory. They watched the thermometers and speed indicator particularly. Slowly their speed decreased until they began to breathe easier again. Then the thermometers indicated a sharply rising temperature.

"Mars has an atmosphere!" exclaimed Masters. "Can't you feed those tubes faster?"

The pilot shook his head grimly. "Full capacity now."

There was nothing to do but wait. The windows were hopelessly blackened by the smoke, and the flames from the tubes were red and murky. The outside temperature rose steadily but their speed was almost zero.

Breathless moments passed as they watched the race between the thermometers and the speed indicator.

Masters shook his head solemnly and Grigson was white with fear. The captain closed the main switch on the signal board, thus calling all his men to their telephones.

"We are going to crash," he said. "If we don't hit too hard, you may be able to save yourselves by hanging onto something—if we crash hard—well . . ."

White-faced men clung to whatever support they could reach quickly. They had but a moment to wait.

There was a terrific jar and a deafening explosion near the top of the ship. Men were flung about the room, some ripping up the railing to which they were clinging. Masters looked about in a daze. He saw that Grigson, whose small weight had saved him from being thrown about, was still clinging desperately to a railing. One of the pilots was climbing painfully to his feet while the other lay quietly with blood trickling from his nose.

The captain dragged himself to a window and looked out. They had crashed into a body of water. The spray had washed some of the smoke and grime from the window, but he could see nothing but heaving, boiling water and spray. Since their craft was still charged with *gravopotential* it staggered under the tons of water that boiled over it until it was free; then it began rising away from the planet.

Masters leaped to the controls and closed a switch. The violet flame leaped into the atmosphere of Mars with a crackling and sputtering.

"Watch through the window, and when the ship is stationary let me know!" he ordered Grigson.

Grigson needed an order like this to stabilize him. He pulled himself to one of the port-holes and gazed out, while Masters waited at the switch.

"There, we are stationary!" he called out.

Masters opened the switch and the violet flame ceased abruptly. They were now drifting in the light breeze about five hundred feet above the water. The captain ordered Grigson to care for the unconscious pilot while he himself went to inspect the damage.

The engine room was but slightly damaged. Masters had used foresight in bolting the light turbines down more securely than would ordinarily be necessary, and they had not moved. One of the engineers was exploring a broken rib, but that was the extent of the casualties here. In the living quarters he found a wild confusion of bedding and off-shift men, but no one was seriously injured. On the upper deck, however—the one which had struck first—he found that serious havoc had been wrought. When the rocket tubes had struck the water and the discharge was cut off somewhat, the tubes had exploded. The man on duty there had been killed instantly and the room left a mangled

wreck. Masters looked out through the holes where the rockets had been. Because the top of the ship was still toward the planet he could see the water heaving and billowing in the light breeze. He held his hand over one of the holes and felt a strong draft of air rushing out into the thin atmosphere of Mars. He stopped the holes as best he could with some parts of shattered debris.

Then he went back to the control room where he discharged some rudder tubes and thus turned the craft over till the bottom was toward the water. It made no difference to the men, as there was no gravity to give them weight, but this was the normal landing position.

CHAPTER III

A Strange Reception

FOR two hours they drifted in the breeze while they attended to the bruised men and set the ship in order. While the men were at work, the captain and Grigson repaired the slight damage to their telescope and made some observations. They concluded that they had splashed into what astronomers call the "Dawes Ocean" at a point near the mouth of "Kaiser Sea."

"'Dawes Continent' is probably the largest body of land on the planet," said Masters. "Perhaps we should go there first."

"It seemed to be thickly populated," Grigson agreed.

Masters gave orders that two of the rudder rockets be fired continuously. The jets of flame and smoke roared into the clean air of Mars as the ship slowly gathered speed toward the north and west. As they traveled, Masters spent his time in the observatory where his laboratory equipment was kept. First he took pressure measurements of the atmosphere of Mars, and found it to be only eight pounds per square inch, instead of the nearly fifteen pounds per square inch on Earth. He next drew a sample of the air and analyzed it. He found it to be almost pure oxygen with a small amount of nitrogen and a trace of hydrogen. There was very little water vapor. He turned to Grigson who was watching him.

"Perhaps we can live here if we are careful not to breathe too deeply," he said. "At least the air is not poisonous to us."

Just then there came a shout from one of the lower decks and they looked out of a port-hole. What was their astonishment to see a bright metal airship darting this way and that with amazing speed. It was cigar-shaped, without wings, and only about fifty feet long. Evidently her pilot called others, for in a few minutes they could see hundreds of the little ships swarming out to meet them. They swarmed about, hovering stationary in the air and then darting away like hummingbirds. It seemed miraculous to those on the space flyer that they could fly in such congested traffic without colliding.

"We are being met by the reception committee," Masters laughed.

"Land ahead!" someone shouted.

All eyes strained to make out the land, but it was still a mere streak on the horizon. It came out of the water rapidly, however, and in the crystal-clear air they could soon distinguish the buildings built along the shore.

At last they flew over the land. Hundreds of small black buildings with red tiled roofs were scattered everywhere, skirting the crooked streets. They could see that the soil was of a peculiar yellowish red or light brown color and even the vegetation was more brown than green.

"Stop the ship over that open space and lower it to the ground," Masters ordered.

The rudder tubes that had been propelling them were shut off and the ship drifted until it was over the clear space. A heavy discharge from the opposite tubes stopped the ship and the *gravopotential* discharge switch closed. Masters watched the little Martian ships dart away in fright from the flame at the dissipating plate.

Gently as a feather they touched the ground, but they remained in the ship to study their surroundings before emerging. The guns had been loaded and were now manned by the gunners in readiness for any hostile move that might be made on the part of the Martians. For several hours they watched the ships dart about. Presently one of them landed and a tiny man stepped out. He was only three feet high, with queer, short legs and small feet that seemed deformed. Masters was reminded of the Brownie pictures in the children's books. The Martian stood beside his ship for a long time before he ventured any nearer. Instead of walking he advanced in quick jumps like a bird.

"The attractive force of their gravity is so slight that they can jump easier than walk," Masters remarked, thoughtfully.

The little man came up close to the ship and then went around it, eyeing it curiously. Presently, when they saw that the monster was apparently harmless, other ships landed and in a short time the field was crowded with gesticulating people. Masters hung a microphone out of one of the port-holes so that they could hear over the amplifier and loudspeaker despite the thick walls of the ship. They listened for awhile to the crowd jabbering away in short sentences, which were broken as though the speakers had not sufficient lung capacity for longer ones. Their voices were disagreeably high pitched, some of them ranging almost above audibility.

"Evidently their lungs are very small," Masters said. "Notice how flat their chests are. I suppose that that is due to the almost pure oxygen of their atmosphere."

One of the little men, perhaps bolder than the others, came up to a port-hole and stared into the ship. His green eyes were large, and they now opened wide with surprise when he saw the huge men inside. He hopped back and gesticulated wildly to the others and a wave of excitement billowed through the crowd. Others now came close and pressed their faces against the lowest port-holes. Their tiny noses and wide, square jaws lined with flat teeth were hideous. But their high foreheads indicated intelligence.

"Let's go outside," said Masters. "I'll go first."

"Perhaps I'd better go first," suggested the news

correspondent. "If something should happen to you we might all be lost, but if I should get killed you will be here to take the others back to the Earth."

Masters objected, but Grigson reminded him that the lives of all rested in his hands. To endanger himself would be unjust to the others. Finally he consented.

Danby Experiments

THE correspondent, whose name was Danby, pocketed two .45 automatics and several hand grenades and then announced that he was ready.

"Stand by the big guns," Masters ordered. "If they show hostility cover Danby until he gets back. Better change the loads to shrapnel. Anderson and McQuire, go into the air-lock with Danby and man the machine guns. Keep that door clear no matter what happens. Now Danby, remember that the air here is almost pure oxygen, so don't inhale much of it. Try breathing very little and experiment with it until you find the proper amount. Bring one of the men back if you can. We'll fit him with an oxygen tank and mask so that he can live in this air. All ready?"

The crew reported that they were ready and the three men entered the air-lock. The door was closed behind them and Masters watched them through a window in the side. An oxygen line fed the pure gas into the chamber, so that, as the pressure was slowly reduced, they could breathe enough of the gas to remain comfortable. At last the pressure in the lock was equal to that outside and McQuire opened the outer door.

Danby signalled through the window. He pointed to his chest and then held his hands close together, indicating that he was taking very small breaths. With a wave to Masters he slid to the ground.

Masters went to one of the port-holes in the side to watch. He saw Danby walking, but with evidently some difficulty. For although he weighed one hundred and sixty pounds on the Earth, here he weighed only sixty, and had difficulty in keeping his feet from slipping as though he were walking on ice.

The Martians drew back before him. Danby was twice their height—a giant among them. He attempted to get close to them, but they cleared a wide space about him and refused to come near. Danby held up his empty hands in token of peace but they evidently did not understand. Finally he sat down and waited. He had observed their curiosity and was evidently giving them an opportunity to come up for closer inspection.

Masters was delighted when he saw that Danby was making good use of his time. He saw him scoop up a handful of the brown soil and put it into his pocket. Then he picked specimens of whatever plants he could reach.

Apparently the Martians felt more confident now that the giant was seated, for some of the bolder ones ventured closer. Since nothing happened they came still nearer, and after a time one even dared to touch Danby's foot. Still he made no sign and when he finally looked up he found himself ringed in by little people and big, staring, green eyes. Masters watched Danby draw a gun in one hand, but the little men made no move to molest him. With the other hand he now reached out slowly and touched one of the Martians. The man drew back slightly, but when he was not harmed he permitted Danby to lift him clear of the ground and appeared delighted that he had escaped harm.

Gradually they became more and more at ease. Masters saw Danby point to one of them and then to the ship, but the little gnome drew back. They became more familiar, however, and presently one of them volunteered to enter the black flyer with Danby. The captain watched the two approach the ship, while the crowd shouted in a babble of high-pitched voices. He went to the window in the air-lock and saw them enter the chamber. The little visitor stared at the two gunners and their weapons. It seemed that he was all eyes and curiosity.

But when they tried to put the oxygen tank and mask on him he started to flee in terror. Danby first put it on himself to show that no harm was intended, but still he refused. Masters rapped on the window.

"Close the outer door and let in some air," he shouted. "When he finds the oxygen thinning and has difficulty in breathing perhaps he'll consent."

McQuire swung the heavy door into place and screwed it down. The air from the main part of the ship hissed into the chamber and presently the little man found that there was not enough oxygen for his tiny lungs. He showed signs of terror. Danby held the mask close to his face and when he felt the pure oxygen enter his lungs he understood, for he donned it eagerly. Danby showed him how to regulate the supply and he got the idea immediately.

When the pressures were equalized one of the crew opened the inner door of the chamber. Danby led the little man into the engine room, where he stood staring about with his big green eyes, while those in the ship stared back at him. On the Earth he would probably have weighed about sixty pounds. On Mars his weight was only twenty-two. He was dressed in a tight-fitting suit of spun metal. It was of a dark blue color and cut like a bathing suit. His legs and feet were bare. Each grotesque hand was equipped with only three fingers.

Becoming Acquainted

HE could scarcely stand up on the steel deck. They examined his feet and found that they were round and flat, about the size of a medium-sized radio dial. In the center of each foot was a bony or horny spike, evidently used to keep his feet from slipping when he hopped. One of the engineers examined his foot, taking some measurements. He went to the storeroom and presently returned with two disks which he had cut from a sheet of heavy rubber packing. He had cut a hole in the center of each, and these he forced over the spikes on the bottoms of the man's feet. He could now stand on a flat surface instead of on a point. The Martian examined the unique shoes with great curiosity and appreciation.

First they showed him about the engine room. He was particularly interested in electricity, for he pointed to the switches and wires with great enthusiasm. One of the little direct current generators was running and he placed his fingers across the terminals and nodded.

Then he ran his finger in a straight line on the floor. Masters was delighted.

"He means to tell us that it is direct current," he said. "Someone give him a pencil and paper and see what he does."

Anderson gave the little man a stub of a pencil and a leaf from a notebook. He showed the visitor that the pencil would make a mark on the paper. He was delighted with this and quickly covered the paper with strange characters and showed them to Masters, who shook his head.

Then they went to the control room where the loudspeaker was located. The visitor listened to the excited chatter of the crowd outside and grinned. Masters turned off the current and all was silent. Then he turned it on again. The visitor seemed to understand, for he looked behind the dynamic cone, traced the wires and nodded.

In the observatory he looked through the telescope. His mask bothered him but he adjusted it and put a big green eye to the eyepiece. He nodded and pointed to the telescope, then to the sinusoidal curve on the paper, and then outside. Masters concluded that he was trying to tell them that Martians used an electric telescope of some kind.

The tour of inspection over, the little man gave the pencil and paper back to Anderson. He took off the shoes and returned them to the engineer, and then, accompanied by Danby and the two gunners, entered the air-lock. When the air pressures were equalized, he removed the oxygen tank and the two Martians left the ship.

Masters watched them from a port-hole. Over the loudspeaker they could hear much excited, high-pitched talk as the people plied the adventurer with questions. He tried to answer them all at once. Now they crowded about Danby and pointed, first to themselves and then to the ship.

It was clear that they all wanted to visit the flyer!

Masters watched Danby to see what his answer would be. The correspondent pointed to the sinking sun and shook his head. Then he pointed to the east and made a motion of the sun rising and then pointed to them and then the ship. Tomorrow they would be permitted to visit the ship. This evidently satisfied them for they opened a lane for Danby as he started back toward the ship.

When the inner door of the lock chamber opened, Danby reported to Masters.

"They all want to visit the ship," he said. "I indicated that they would be permitted to in the morning. I hope that you don't object?"

The captain was thoughtful. "They seem to be peaceable enough. I suppose that we can drop the atmospheric pressure inside the ship to balance that outside and then open both doors in the lock. We could let them in a few at a time. And we wouldn't have to bother with oxygen tanks for them. That would give us a good opportunity to permanently repair those holes at the top of the ship where the tubes exploded. We'll try it and if they have I don't see why, it won't be all right."

"I think so," said Danby.

CHAPTER IV

A Grim Warning

THE sun went down behind the western hills and night closed in suddenly. During the night Masters and Grigson analyzed the soil which Danby had brought in and found it to consist mainly of metallic oxides. Even the plants contained a great percentage of oxygen and they were astonished to find that they were warmer than the surrounding air.

"Warm-blooded plants!" Masters exclaimed. "I wonder if they remain warm all winter. Perhaps we can find out some time."

The next morning dawned bright and clear. Because of the rare, dry atmosphere the sunset and the dawn were not heralded by soft twilight and glowing colors. When the sun set, the sky became dark almost immediately. When it rose, the daylight came also with startling suddenness

Masters looked out and was amazed. Thousands of little ships had come with the sun and other thousands were flying toward them from every direction. The countryside was crowded by a vast throng, all patiently waiting to visit this ship from outer space. The news had traveled fast, perhaps by some sort of radio, and it seemed as if half of the inhabitants of the planet must be present!

After breakfast, preparations were made for the reception. Armed guards were stationed at various points and the two machine guns in the air lock manned. The engineers cut a number of washer-like shoes from sheet packing and these were piled up in the lock chamber. Pure oxygen was released in the ship as the pressure was being reduced. When all was ready the outer door was flung open and several of the little people admitted.

Like the first visitor, they were conducted from one deck to the next, examining everything with keen interest. They were so quiet and orderly that it seemed a farce of routine to keep the guard posted. When this group went out others took their places. As the forenoon wore on and nothing alarming happened, Masters gave orders that they be permitted to file through in a continuous line instead of in groups. He was in the engine room when he was called to the observatory by the guard stationed there.

"There are five or six around the telescope. They act like they know what they are doing. I thought that you would like to know," he informed the captain.

Masters went over to the telescope where he was astonished to find several of the little men evidently making observations and then calculating results. Their figures were queer, scrawling characters which were utterly meaningless to Masters. They seemed to be discussing something of great interest to themselves. When the captain joined the group one of them pointed to the ship and then to the telescope. Evidently he wished to know where they had come from.

In the light atmosphere of Mars some of the brighter stars were visible to the naked eye during the day, and with the telescope there was little difficulty in locating any body that was not too close to the sun. Masters

located the Earth and focused the telescope upon it, setting the clockwork mechanism to keep the planet within the field of view. One by one the little men looked through the eyepiece and nodded. Masters then pointed to himself and the ship and then to the telescope—they were from the Earth.

The effect upon the astronomers was magical. They became excited and chattered in their high-pitched voices. Others in the line caught up the word *Slee*, which was evidently their name for the Earth, and in a few moments the entire throng outside was a mass of screeching excitement. One of the astronomers then caught Masters' attention and motioned that they too had tried to fly to the Earth, not only once but several times, but each attempt had been a failure.

Masters looked again at the Earth, a tiny sphere in the remote distance, and wondered if they would ever return to it. While he looked another body floated rapidly across the field of view. It was the Martian moon, Phobos, on one of her three daily trips around the planet. He considered it worth his time just to see this remarkable moon which circles Mars three times as fast as the planet rotates on its own axis so that it rises in the west and sets in the east.

The captain went down to the control room where he found Grigson deep in thought and greatly agitated.

"What's the matter?" he asked. "You're not afraid of these people, are you? I'm sure that if we were to leave the ship here for several years nothing would be molested. Haven't you noticed how methodically they replace everything that they examine and how careful they are in handling apparatus?"

Grigson frowned nervously. He was more agitated than he had been on the entire journey.

"That," he said, "is just what causes me anxiety. Perhaps you have noticed that there are no legal authorities, no police, no criminals—apparently no organization of any kind. I would feel more secure if some of them were prone to steal articles from the ship and were punished according to some civil or moral code. As it is, I fear that these people are not immoral but unmoral—that they have no idea of what is right or wrong. It is that observation which alarms me. We felt that we were in danger of serious injury while we were landing, but I am now certain that our danger is a hundredfold."

Masters laughed. "Perhaps they are so far advanced that they don't require legal restraints. At any rate, I don't see what that has to do with our situation."

"If you had studied psychology instead of mechanical engineering it might mean more to you. As it is, I shan't speak further of my fears, for I am sure that you would only ridicule me." There was a hint of acid in his voice.

"If I had studied psychology instead of mechanical engineering we'd have been deprived of this wonderful opportunity," Masters retorted.

That ended the conversation and the captain went outside. He found Danby exposing hundreds of feet of moving picture film

"Wait until we get this film on the screens in old U. S. A.," he laughed. "I can hardly wait until we get back."

"According to Dr. Grigson we might experience some difficulty in getting back," Masters smiled. "But we shan't try to escape until we examine their cities and get some pictures of them."

Danby stopped cranking to laugh. "What's the matter with him? He reminds me of an old reporter we had on the staff—we called him 'grandma.' You better not let him out of the ship—he might see his shadow."

Opposition!

As the day wore on and countless thousands visited the ship, a few women began to appear and presently some of the older children were scattered along the line. They were all similarly dressed in the metallic, bathing-suit-like clothing, but the colors were not so bright as those of the men. Masters induced one of the men to bring him a suit which he examined with great interest. It was light and pliable but so tough that it was an effective suit of armor. He decided that it was made of a steel which Earthlings know nothing of. When Grigson examined it, he was more nervous and agitated than ever. True to his promise, however, he said nothing.

For several days the procession moved through the space flyer, but at night the ship was closed and the air pressure within brought up to that of the Earth. These were nervous days for Grigson, triumphant ones for Masters and hectic days of alternate picture-taking and writing for Danby and the stenographer. So orderly were the little visitors with the green eyes and so insatiable their curiosity that Masters did not insist upon a guard and the members of the crew wandered about within the ship or outside as it pleased them.

The days slipped by and the Earthlings became quite at home on Mars. They wandered about the cities, sometimes remaining there over night. Many times they left the ship unguarded but not once was a single article disturbed, although the Martians were constantly coming from remote parts of the planet to view the craft.

The buildings of Mars were of a dense black material, which Masters later learned to be slag from the many iron smelters. It was cast in molds, the resulting blocks being about one foot square and eighteen inches long. These were cemented by a peculiar mortar of a highly corrosive nature, which fused the blocks together with the result that the houses were practically of one piece.

The Earthlings found it difficult to get into their houses, for the doors were only four feet high and the ceilings only five and a half to six feet high. The floors, like the streets, were made of a rubber-like substance into which the spikes on the bottoms of the Martians' feet sank until the circular bottoms of their feet rested against the surface. When they lifted their feet again, there was no evidence of a hole left behind. Masters shoved the blade of his penknife into the material but when he pulled it out he could not find a mark. Their windows were glazed with a pale green, flexible glass made from some of the by-products of their iron furnaces.

Although Dr. Grigson accompanied the others on these trips into the cities he became more and more nervous. He withstood the good-natured banter cast his way by others of the party and said nothing.

It was on one of these trips into the city near which the flyer had landed that the friendly attitude of the inhabitants changed to hostility. Masters and Danby had been exposing more moving picture film and were searching for something new to interest them when they found, near the heart of the city, a strange building with a dome-shaped roof made of a steel framework and covered with queerly lensed plates of pink glass. They ground out a few feet of film from different angles and then proceeded to investigate. As they approached the entrance, however, they were surprised when one of the passers-by emitted a shriek. The alarm was caught up by others until the entire city was in a turmoil. Martians came hopping from all directions and clustered about the building as if to protect it from intrusion.

Masters and Danby hesitated. Never had they been met by such opposition.

"Must be some kind of holy of holies," Danby remarked. "What shall we do?"

"I suppose that we'd better retreat," said Masters. "Suppose we come back again tonight when the city is sleeping?"

"Fine. I don't want to leave here until I find out what's inside of that building. Let's go now so that this infernal hub-bub dies down."

They started away from the building and the Martians ceased their alarms. Masters looked over his shoulder to find that the crowd about the building was dispersing rapidly and the street was assuming an aspect of normality.

That evening when they told the others about their discovery Grigson became white with fear but said nothing.

"Tonight, when they are asleep, we are going to return and investigate," said Masters. "These people seem to retire with the sun and never stir during the night so I don't think that they have guards about. I suppose they think we do likewise. I know it is rather an underhanded trick, but there is something in that building of supreme importance and which may add a wealth of material to our records."

"Please forego the material," Grigson begged. "If they should discover that you have been there they may turn upon us and annihilate us. I feel that I understand these people better than you do, and even now I can see dangers of which you are totally unaware."

"But, my dear doctor," Masters objected, "I see no harm in merely looking into the building. And we are here to gather data, regardless of the dangers we may encounter. We have decided—Danby and I will go tonight to visit that queer place."

CHAPTER V

Through the Dark City

THE two moons of Mars were shining that night when Masters and Danby started on their stealthy investigation. Even the two moons reflected but a fraction of the light cast by the Earth's moon. Before they reached the dark, sleeping city, the flighty Phobos had set in the east and the pale radiance of Deimos was scarcely enough to light their way. They stole through the deserted streets between the lanes of black houses. Their shoes made no sound on the soft streets. Masters felt like a thief in the night, but, he reflected, this was a scientific expedition and he felt somehow justified.

They had no difficulty in finding the queer building with the dome of pink glass. Despite the Martians' knowledge of the sciences, their houses were wired for many conveniences but not for light. Masters had come to conclusion that they knew nothing of electric light, but now he was surprised to see a pink light emanating from the dome and casting a pale radiance upon the surroundings.

Cautiously they advanced to the edge of the low dome and attempted to peer through the glass. But they could see nothing, inasmuch as the glass was molded into lenses. They stole around the building to the door, where they hesitated a long time while they listened. Not a sound came to their ears.

Carefully they opened the door, which, like all other doors in the city, was not fitted with a lock. They found themselves in a tiny ante-room where they stooped under the low ceiling. Another door led into the main part of the building. They opened this cautiously and stood there in utter amazement. In the soft pink light coming from many filimentless electric lights were trays upon trays of eggs! They advanced into the room after assuring themselves that no one was in sight. It was insufferably hot and damp and an odor of stale fish permeated the air. The eggs were about four inches in diameter, soft-shelled and of a light brown hue.

Certain now that they were alone, they wandered among the trays.

"What is this all about?" Danby asked.

"I'm not sure, but it appears to me that these people lay eggs like birds and this is the community incubator. In fact they are like highly-developed birds. No wonder they objected to our coming here."

They found a stairway leading down into the basement. They walked down the steps and found themselves in a smaller room where the eggs were hatching. There were but a few eggs here—they counted only ten. Two of these had hatched and the tiny Martians were kicking and wriggling in the soft pink light. Another was just tearing the shell away with the spikes on his feet.

"Just as I thought," said Masters.

"Suppose we take one of these eggs back to the Earth with us?" Danby suggested. "If we come back with a story like this no one will believe us. We'll have to bring back an egg to prove it."

"No," said Masters. "These are to be living, thinking beings and we can't destroy a life by taking an egg. No, if you don't think that they will believe your story, don't tell it in the first place. Come, we'd better go."

Masters led the way up the stairs and through the upper room. Perspiration was dripping from his face when they reached the cool of the night air. He felt as though he had intruded into a sacred place, and he said nothing as they stole out of the city and across the open to their space flyer. He did not notice that Danby had something under his coat that bulged and which he carried with great care.

In the Canals

THE next morning Masters noticed that Danby acted queerly. Several times while they were eating breakfast he left the table to look out at the Martians who, as had become their custom, waited for the door of the ship to open that they might visit the flyer. Every day there were new arrivals from distant parts of the planet, always coming with the sun.

Masters had been telling the others about their discovery of the night. Grigson had been listening until he could contain himself no longer.

"You didn't take any eggs, did you?" he asked.

"No," said Masters. "We didn't disturb a thing. We felt that it would be murder to take one."

Again Danby went to the port-hole to gaze out over the scattered groups of people who waited patiently for admittance.

"What makes you so nervous this morning, Mr. Danby?" Masters asked.

"I was just wondering if they had discovered that we visited the incubator last night," the reporter muttered.

"But we didn't disturb a thing—how should they know?"

"After we got back last night I wondered if we might have left a shoe print somewhere for them to discover. I began to worry about it and—well you know how a person wonders, when he's at the theater, if he banked the fires and locked up the house before he left. That's the way I feel."

"But their streets are made of that rubber-like substance and are clean, so how could there be a shoe-print to betray us? And we did no harm, so why worry?"

For several days Danby refused to leave the ship, but gradually, when nothing happened, he became more confident and resumed his photography. The people seemed just as eager to show them about their city as before, so he concluded that they had not discovered the intrusion.

Masters was particularly interested in the canals of Mars, but as yet had not been able to make the inhabitants understand what he wished to see. One day, however, he procured a chart of the planet made by the people thmselves. It was a plate of rustless steel on which they had stamped or engraved the chart and filled in the lines with a black corrosive ink. Here he found the canals and when he pointed them out to a group of Martian scientists they nodded. They pointed out that they were digging another canal parallel to one of the older ones and indicated that they would take the visitors to see the project the following day.

That night in the space flyer Masters told the others about the invitation. Everyone wished to see the canals and particularly the one under construction. It was finally agreed that they would all go. Masters produced the chart and showed them the location of the proposed canal which was far north of the equator in the cold of the Martian winter. The discussion came to an end and the captain replaced the chart, for he wished to take it back to Earth with him.

The next morning the Martians landed a number of their little torpedo-like ships near the space flyer and waited for the Earthlings to emerge. They could carry only one passenger in each craft, so the crew was scattered in as many ships. Masters crawled into one of the tiny ships and found the cabin so small that he could scarcely turn around. He finally managed to make himself somewhat comfortable. When all was ready the pilot moved a lever and the craft shot into the air with amazing speed. It darted about in response to the pilot's slightest touch with such jerky speed that Masters found it difficult to remain seated. The ship was handled by two levers, one of which was mounted in a universal joint in the dash. The up and down motion of the lever caused the ship to rise or descend while the motion to the left or right caused it to turn in the direction it was swung. The other lever controlled the speed. The Martian demonstrated his ship by moving the lever in a circular motion. The craft traveled in a spiral through the air with such sickening speed that Masters signalled him to stop.

The fleet traveled in a swarm, the ships sometimes coming so close together that they almost touched. There seemed to be no collision hazard, however, and Masters gradually ceased to worry about the seemingly reckless flight.

For several minutes they flew along the ocean shore and then swung inland. There were miles of tilled ground but no buildings, for the Martians live in cities along the water and fly to their fields. Presently they sighted a city-skirted canal far ahead. It seemed but seconds before they were over the canal and Masters was amazed at its size. He judged it to be about ten miles wide and of great depth. The quiet water was somewhat above the surrounding land and small ditches taken from the canal carried water to the fields. Smokeless, steamless tugs hauling great barges loaded with food and building material labored slowly over the placid surface.

An Amazing Sight!

AFTER crossing the equator they flew over a vast cluster of iron smelters and steel mills. The Martians used few metals other than iron and steel, but this metal, treated through their wonderful knowledge of metallurgy became rustless, soft or hard, colored or white as suited their needs. An alloy became a better electrical conductor than copper and much stronger. Another alloy was lighter than aluminum, yet it was strong enough to make an ideal armor plate for battleships had they used them.

In less than an hour they were far north of the equator and flying swiftly along the canal. Dotting the sheltered hollows were flecks of snow which became bolder as they continued northward, until finally the ground was almost uniformly white. Now they left the city-bordered canal and darted to the left until they were about twenty miles from the waterway. Below they could see many ships like the ones in which they flew. Several huge ones were resting upon the snow, while their pilots worked on a line that stretched far to the north. The Martian pushed the stick down and pulled the speed control into reverse. The ship stopped suddenly and dropped straight down, touching the ground lightly.

Masters left the ship and strolled over to where the men were at work. He was puzzled when he saw them cutting a narrow slot in the frozen ground. This cut was made with a long knife or chisel operated by an electric hammer. As the cut became deeper, longer knives were used until the forty foot knife was buried. The slot was now about five inches wide and as deep as the longest knife Hundreds of men were at work as far in each direction as Masters could see. The slot had evidently been surveyed, for it was perfectly straight.

In the early afternoon the work was completed. The large ships now lifted from the ground and hovered over the slot. Hoses dropped from the huge craft were guided by the men on the ground. Masters went up close to one of the hoses and saw an amber liquid flowing into the trench. This liquid, which was like a heavy oil, was slightly warm and steamed in the chill air. When the trench was filled the ships withdrew, rapidly dwindling away in the distance toward the south. Masters' first thought was that this was an explosive and he prepared to leave the vicinity, but the Martians calmly gathered up their electrical apparatus and then stood watching the liquid.

Gradually it congealed and then solidified. As it became colder an amazing thing happened. Instead of contracting when chilled, this now solid amber wedge expanded gradually to many times its former width. The frozen earth, as it was shoved aside, creaked and grated, sometimes snapping loudly. Above the trench the expanding substance puffed up like a huge amber sponge. By the time the wedge ceased expanding, the canal was about ten feet wide. The huge freighters had by this time returned with more liquid which they poured over the expanded solid. Instantly the solid melted and contracted like a punctured balloon, leaving but a small quantity in the bottom of the trench. More was added to this from the freighters. Again they left for the south. This time, when the liquid solidified and expanded it shoved the walls of the canal over two hundred feet apart. Masters concluded that the liquid was used over and over. In the morning when it was cold farther south they used it there and then during the middle of the day when it warmed they pumped it up and carried it to the north where the day remained cold. The process of expanding the canal was repeated until the ditch was some eight miles wide.

CHAPTER VI

Green Eyes of Hate!

IT was now late in the afternoon and the men were preparing to return to their winter homes in the south, when hundreds of the little ships appeared upon the southern horizon. Masters and his men were walking over the frozen liquid picking up samples of it for future analysis. Dr. Grigson, as it happened, was some distance away examining the seed pods on a cluster of dried weeds.

The ships arrived from the south and settled in droves all about them. Without warning, the air became electrified with screeching excitement. The workmen dropped their tools, their green eyes blazing with hate. Before Masters could recover from his astonishment the little men had attacked Dr. Grigson and overpowered him with sheer numbers. In a moment the little scientist was trampled into a shapeless corpse. The wave of infuriated Martians now turned upon Masters and his crew.

The Earthlings stood rooted to the ground in amazement for a second. Then Masters awoke to the situation. The Martians meant to murder them!

"Stand together, boys!" he shouted, drawing his automatic.

He took careful aim at the breast of the foremost man and squeezed the trigger. The heavy slug knocked the little man completely off his feet, but his metal suit had stopped the bullet and he leaped up and came on again.

"Aim at their faces!" Masters shouted.

Back to back the little ring of men faced the oncoming horde. They were surrounded now, and the mass was closing in. As fast as they could shoot them down others came to take the places of the fallen ones. Masters, his ears numb from the continual roar of the heavy pistols, knew that it was a lost battle. Yet to stop firing meant certain death for them all—there was no mercy in that ring of blazing green eyes.

But the firing was beginning to tell upon the Martians. The bark of these death-dealing machines was evidently new to them, and they fell back, leaving the surface of the frozen canal strewn with dead. The Earthlings took the opportunity to reload.

"If we can hold out until dark they may go home," said Masters hopefully, although he felt desperate. "Then we might be able to escape in the dark. I was a fool to leave the ship."

But the Martians were closing in again. They came on rapidly, hopping over the frozen ground.

"Make every shot count!" shouted Masters above the din of shrill voices and the clatter of thousands of horny spikes.

Again the .45's roared defiance and the oncoming wave thinned only to close in again. It was difficult to aim at any particular hopping Martian, but they were so thick that one could hardly miss. The gun in Masters' hand leaped steadily as it belched heavy slugs into the green-eyed faces now close to him. Then the hammer snapped down on an empty chamber. With a vicious swing he brought the weapon down on the head of a Martian who was trying to grapple with him, and then slipped in a fresh clip. Before he could bring the gun up one of the Martians kicked him on the leg and with the sharp spike tore open the captain's leg from knee to ankle. The sharp, searing pain made him faint for a moment, but he shot the man down and fired methodically into the faces of those closest to him. The dead were piling up and the advancing Martians stumbled over them.

Again they withdrew, this time dragging the dead and injured with them. They were evidently preparing for a final rush.

Masters felt weak. He had been breathing more deeply than usual and now the pure oxygen of the atmosphere made his heart pound and his blood hot. He reeled around to look at his men. They had fared little

better than he and were sitting down to keep from falling.

"Don't breathe any more than you have to," Masters warned. "How is the ammunition?"

"Almost out," said Danby. "One more rush like that and I'm through!"

Masters looked desperately at the sun; but he saw it would be an hour before it set. A hopeless feeling came over him—they could never endure another rush like the last! A thousand ideas flashed through his mind. What had Grigson said about these people? If he had only listened to him! But it was too late—

Desperate Moments

AGAIN the horde rushed at them. There was a new note in their high-pitched voices. They had wounded Masters and that fact seemed to encourage them, for they now came on with fiendish light in their green eyes. They were rushing in to the kill. Masters fired desperately, yet with slow deliberation. But it was hopeless to stem the tide that rolled in upon them with relentless fury. The heavy slugs seemed only to make them more reckless and determined. Masters slipped home his last clip of cartridges and resumed firing. Now they were upon him and he used the gun as a club. Desperately he brought it down upon one head after another. A deadening pain came from his injured leg and seemed to be dragging him down. A Martian leaped at him and before he could knock him down his other leg was torn open.

"The cook is down!" he heard Danby yell, but he dared not turn his head to see what was going on behind him. Two Martians leaped upon him and tried to bite into his throat, but he beat them off. While he fought these, others tore at his legs until they felt as though they were ribbons of flesh. Another enemy sank his teeth into his left hand and he brought his gun down automatically. His blood was boiling from the rich air and his head reeled. It was the beginning of the end.

His ears roared with a strange noise. He could not tell whether it was the effect of the air or of something outside. As in a delirium he fought on. Four of the little men leaped upon him and went after his throat with their ugly teeth. He knocked one of them off, but his knees were giving way beneath him. His arms were like lead. He got his hand over the throat of one and brought his gun down. But others leaped at him and slowly bore him to his knees. The roar in his ears became louder and he became confused.

Suddenly there was a terrific explosion. The Martians relaxed their grip on Masters and cried out with shrill screams of terror. Masters staggered slowly to his feet in confused relief. He stared at the retreating Martians, wondering vaguely what had happened. To his left he had a glimpse of a dark object falling. It touched the ground and seemed to rebound with a terrific roar. Brown earth, black smoke and Martians flew in every direction. Another roar and again the ground erupted smoke and Martians. Two more eruptions and the little men scattered in wild confusion toward their ships.

Masters, staggering like a drunken man, looked up. What was his amazement to see his own ship hovering over the battlefield! He saw a blaze of violet light come from the bomb discharge tube and a black object drop out of it. In an instant there was another ear-splitting concussion and more debris bounced into the air.

"Who could be operating that?" he wondered. "All my men are here!"

Desperately he waved the ship to come down. Almost instantly a flame of violet blazed and crackled from the *gravopotential* discharge plate, and the ship settled down beside him. The door banged open and the men dragged themselves and their wounded to the craft. Masters, staggering under the load of the unconscious cook, crawled into the lock chamber. From here he helped the others with their burdens of disabled men. Danby, only slightly bruised, brought up the rear, covering their retreat. He was just about to crawl in when one of the tiny ships of the Martians flashed down and felled him with a heavy blow. Masters seized the wrist of the unconscious man and dragged him inside. With almost a sob he closed the door and screwed it home.

"All aboard!" he called weakly. "Whoever you are in the control room, get the ship away from here!"

The *gravopotential* generators coughed and started. They could hear the ships of the Martians beating futilely against the shell of the monster, but as the space flyer gained altitude the attackers were left behind.

A Warning Too Late

MASTERS and the less seriously injured of the crew dragged the wounded into the engine room and closed the inner door of the air lock. In a few minutes they had restored the air to Earth-normal and all breathed more easily. Masters pointed to one of the pilots who had not been much hurt.

"Go up to the control room and find out who is running the ship. Take the controls, and send him down. I'm too tired to move."

The pilot staggered up the stair and presently another man came down. Masters stared at him as if unable to comprehend.

"Dick!" he finally rasped. "How in God's name did you get here?"

Dick looked at his father's torn legs and bruised arms.

"Wait till I get you bandaged up and I'll tell you all about it," he said.

"You'll tell me now and then bother with bandages!" the elder Masters commanded.

"Enough!" Dick exclaimed sharply. "I'm in command here until you are on your feet again. Here men, break out some bandages and get to work."

"Danby is dead!" another spoke up. "Broken back."

The work of caring for the wounds was finished in silence. A woman helped with the bandaging, but Masters did not see her, for he lay back with his eyes closed. Dick gathered a semblance of a crew from the least injured and adjusted the ship on her course as best he could.

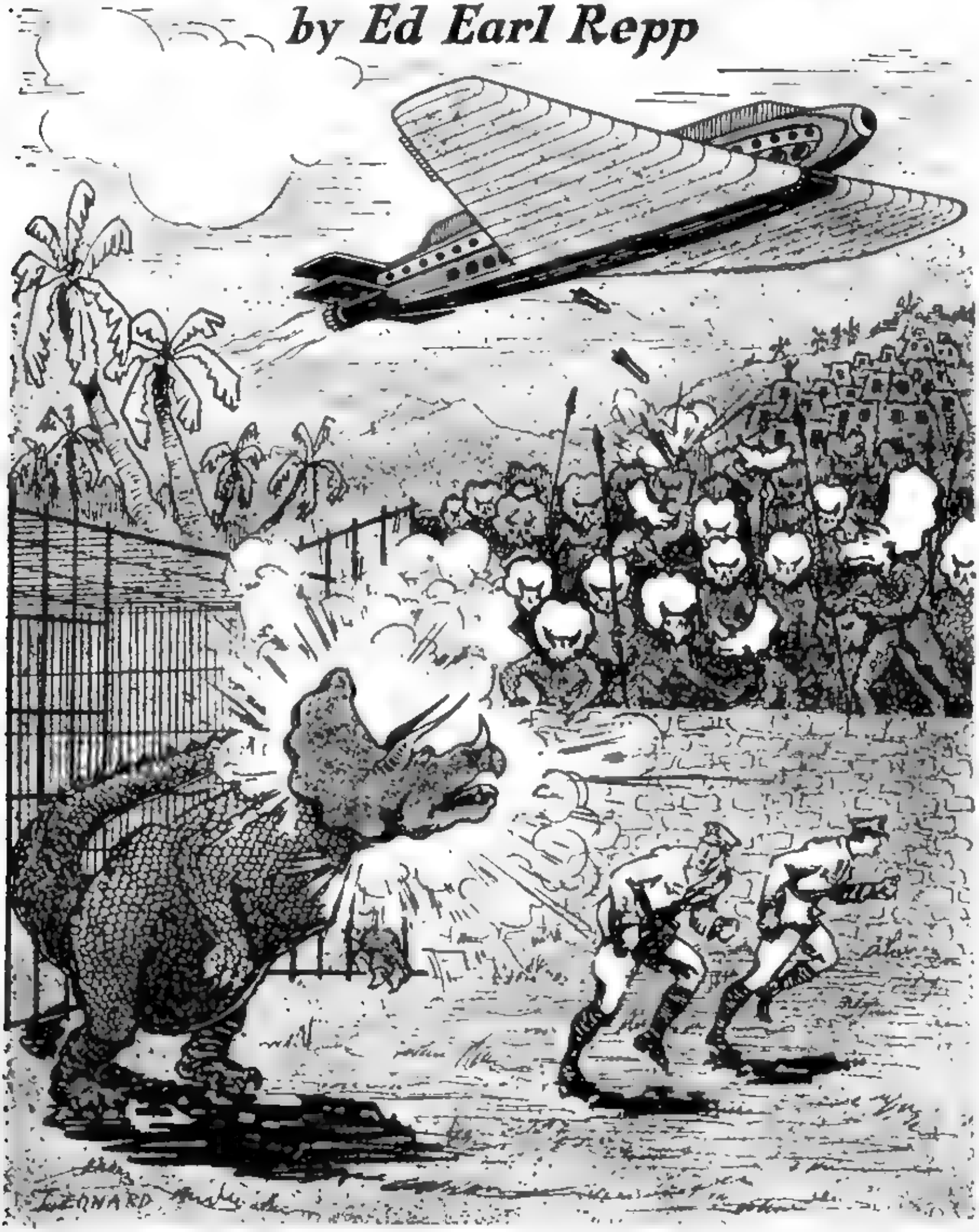
"Now," said Masters, "tell me about it."

"It's really very simple," said Dick. "When you refused to let us come, Helen and I got married and stowed away in the store-room. Just before we left we sent a letter to the newspapers, telling them about our marriage and our plans for a stowaway honeymoon to

(*Concluded on page 271*)

The Annihilator Comes

by Ed Earl Repp



(*Illustration by Leonard*)

Overhead the *Annihilator* hovered like a tremendous bird and spread death into the Triceratopsian town

A Sequel to "Beyond Gravity."

IT did not take Lieutenant Robert Allison long to recover from the injuries he had received during the fateful maiden flight of the United States airship *Annihilator* when it was caught in the grip of a deadly Rocky Mountain up-draft, and whisked upward so that it resisted the gravitational pull of the Earth.

Perhaps the most effective curative that had brought him around to normal after some weeks of convalescence in the base hospital at Rockwell Field, San Diego, was the almost constant presence of Joan Holdon. With her father, she had moved to San Diego from Denver, and taken up residence in the Lindbergh Aero-Hotel, just to be near him.

For many hours Allison had hovered between life and death after the *Annihilator* was rescued from the air-streams beyond gravity* by the genius of Professor Stilsen. For hours each day Joan had sat at his bedside and watched the man of her choice emerge from oblivion and gradually regain the bloom of health. Then had come a day when attending physicians pronounced him completely recovered. His crushed ribs had knitted together and he had fought off the terrible effects of his tragic experiences.

ED EARL REPP

Now, with Joan at his side, he walked through the hospital ward containing some of the *Annihilator's* convalescing crew and bade them good-bye. At the end of the hall a white-capped nurse was waiting for him, smiling.

"Well, Lieutenant, we're glad to see you in health again," she said. "You've been such a good patient that we'll all miss you. How do you feel, sir?"

She tapped her hand with a red, white and blue envelope and regarded him with a trained eye.

"Fine, Miss Hale!" he replied, enthusiastically. "Couldn't be better! In fact I feel a hundred per cent better now than I did before the accident. Thanks to everyone here! But I'm mighty glad to be loose again!"

"I don't doubt it, Lieutenant," the nurse smiled. "Hospitals are one thing and freedom is another. It's hard to keep you flyers penned up for long. Here's a telegram that just arrived for you, sir."

She handed him the colored envelope and he tore it open excitedly. He knew it was from the government. Its color told him that and more. It had come from the Aviation Division, Department of War. He read it quickly and handed it to Joan, his brows clouding.

"Lieutenant Robert Allison,
Base Hospital, Rockwell Field,
San Diego, California.

The War Department has this day commissioned you to command the Annihilator II *stop Ship will be ready for flight ten days from date stop Report to Chief Commander Bartley at Kitty Hawk within ten days of your discharge from hospital for further orders stop congratulations and regards*

Secretary Aviation Division
War Department, U.S.A."

"Why, Bob!" Joan cried gleefully. "You've been promoted! That's wonderful! Just think of commanding another ship like the *Annihilator!*"

"But I had not expected the commission nor an order to report for duty so soon, Joan," he said, frowning. "I was hoping for an extended furlough until our plans materialized, at least. I don't like the idea, dear. It means that we'll have to postpone . . ."

"Oh, come on, Bob!" she said. "Our plans can wait until after you've reported. Perhaps we'll have the wedding ceremony at Kitty Hawk instead of here."

"I know, Joan," he insisted, "but what's a wedding without a honeymoon?"

She pulled at his sleeve mischievously and smiled into his face despite a tear that formed in her own eyes causing them to glisten like minute diamonds.

"The United States Government waits for no man, Robert!" she said. "The wheels of war and conquest move despite the joys and sorrows of those concerned. You'll have to move with them. I'll be content to wait. We'll still have our future to look forward to, beloved. Delay will make our marriage sweeter!"

"I guess you're right, Joan," he said, resignedly. "We'll have to wait unless this order is just a preliminary one. I hope it is, and that I can return at once following my formal installation in command. I'm so stunned over it all that I can't think clearly!"

"It's wonderful!" Joan repeated. "Just think!

YIELDING to the demands of our readers, our popular author gives us now a sequel to his "Beyond Gravity." In this thrilling story we get the adventures of the sister to the great airship Annihilator and its brave commander, Bob Allison. Into the frozen north they go, to search for the missing explorers; and they encounter adventures and a terrible menace that man had never dreamed of. Incidentally our author gives us a new view of the Arctic zones, which, although startling and revolutionary, yet has a good deal of scientific authority behind it.

This story illustrates vividly, furthermore, how aircraft are rapidly laying low the barriers of earth that have hitherto hidden from man the secrets of his planet. In a short time we shall have investigated every nook and cranny of our earth.

* "Beyond Gravity," by Ed Earl Repp, August 1929 issue, AIR WONDER STORIES.

They'll be saluting you as Commander Allison now, Robert!"

She stepped off a few paces and stood at attention. She brought her right hand upward in a stiff salute.

"I salute the commander of the great *Annihilator II*," she said, impulsively. "And I pray that she will have better luck than her unfortunate sister who now lies buried in the . . ."

"Scrap yard!" he cut in, smiling and pulling her to him. "But let's forget about ships and scrap yards, Joan, and enjoy my few days of liberty together! You never can tell what the future holds for a flyer! Who knows, they might send the *Annihilator* around the world or on some other wild goose chase, the reason for which nobody, not even the War Department, knows!"

"Well, if they do, Robert," Joan said as they walked out of the hospital building, "you stay away from those Rocky Mountain up-drafts! I don't want you to get beyond gravity again. Perhaps you wouldn't come out so fortunately as you did this time!"

Holden Gives Advice

COMMANDER ALLISON, his blue eyes flashing with happiness, followed Joan into her trim little aero-speedster with its transparent hummer wings, and sat down beside her. She tested the controls, stepped on the starter and shot the craft upward in a perpendicular ascent, its helicopters droning like miniature windmills. It hovered in mid-air for a moment while she turned on the pulling duals. Singing screws carried the craft as swiftly and gracefully as a humming-bird toward San Diego which lay across the bay.

She looked downward upon Rockwell Field. It lay serene and calm with its brood of government planes. A few short weeks before, it had been the scene of much activity and apprehension, with the partially destroyed hulk of the *Annihilator* hanging above it in the grip of Professor Stilsen's magnetic drums which had coaxed her out of the distant heavens with her cargo of dying men. Joan shuddered, recalling certain scenes in which the man by her side had figured. She pictured them carrying his still, bloody form from the wreckage. There had been others, too, many others, who had not survived the ordeal and now lay under white crosses on the summit of Point Loma. A tear coursed down her cheek and she sought Bob's hand with trembling fingers.

"God has been good, Robert," she said. "Good to both of us! He saved your life for me."

He stared at her blankly for an instant and then nodded, glancing downward.

"I can imagine how you felt, Joan, when they carried me out of the wreck," he said. "It's odd that I should survive, hurt as I was, while others went West. Oh, well, it's all in the game of life. One fellow gets off while the other stands the gaff."

She squeezed his arm affectionately and concentrated on the controls. Straight ahead loomed the Lindbergh Aero-Hotel, rising into the heavens like a great, towering obelisk. Above it swarmed hundreds of craft, darting hither and yon like so many flies whose wings scintillated under the glare of a warm sun.

Joan cut her forward motors and whirled the helicopters for a vertical descent onto the flat top of the sky-scraper. The little aero-speedster hovered and then dropped slowly. They hurried to the Holdon suite on a lower floor.

In the Holdon rooms, Joan's father nursed and cursed a cold in the head. When Joan and Bob arrived there, his valet was placing a bowl of mustard-water under his feet. Mr. Holdon was wrapped in a blanket and swearing softly under his breath.

"Dang this danged cold!" he was growling. "I'm the damndest . . . wauchew-w-w! . . . unluckiest critter in forty-eight states! Who the devil said you can't catch a cold in San Diego! Ouch! Get away from here you grinning baboon! That water's too danged hot!"

"I'm sorry, sir!" said the valet. "You asked for it hot, sir."

"I don't care what I asked for, you damned idiot!" he snorted. "C-c-cool . . . wauchew! . . . it! Of all the blankety-blank . . ."

"Why, daddy!" Joan said, remonstratingly. She and Bob had been standing just inside the door regarding the afflicted man as he sat in front of an open fireplace. "Aren't you ashamed to use such language!"

He looked up, his nose the color of a sun-reddened plum, his eyes as watery as his lips were colorless. Ex-Congressman Holdon always was subject to colds in the head and he was suffering one now in the act of becoming acclimated to San Diego's semi-tropical warmth—a decided change from the chill of the Rocky Mountain region whence he came.

"No I'm not ashamed!" he grumbled. "This old damn cold is driving me crazy! The blankety-blank . . . oh, hell! What's the use!"

"Well you might have a little respect for me, daddy," said Joan. "And besides, I don't want Bob Allison to learn such talk!"

"Good Lord, Joan," he gasped, "don't tell me you're going to make a ninny out of Bob Allison!"

"I'm not going to do that, daddy," she said, "but I'm not going to let you teach him your whole vocabulary, either! I brought him home with me and he's got some big news to tell you while I dress for dinner!"

Commander Bob Allison walked from his obscurity into the room, and Mr. Holdon rose to greet him.

"Bob!" he said, nodding to the valet to remove the bowl of mustard-water. "How do you feel, my boy?"

"Exceptional, Mr. Holdon!" Bob nodded, taking the elder man's proffered hand. "Feel great! Sorry to see you in such bad shape."

"Me? Humph! I get a cold in the head every day before breakfast!" Holdon growled. "I'll be all right in a day or two. I'm mighty glad to see you, Robert! You know your father and I have been friends since we went to school and I sure have worried about you!"

"Oh, I'm all right now, Mr. Holdon," said Bob. "I wired dad at Washington, telling him I've been turned loose and commissioned to command the sister ship of the *Annihilator!*"

"Command what?"

"Just as I was leaving the hospital I received an official telegram stating that the War Department has

promoted me to commanding rank. I'm to command the *Annihilator II*, Mr. Holdon!"

"So that's the big news Joan hinted at, eh?"

"That's it, sir, but I wish they'd have waited until after Joan and I had had time to . . ."

"Get married, eh, Bobby?" Holdon interjected.

"Well, we sort of planned that, sir." Bob stammered, his face reddening. Joan's father was searching his eyes with a penetrating look. He straightened abruptly and projected his palm again.

"That's damn fine, Bob!" he said. "So you've tamed that little wildcat, eh?"

"Tamed her?" Bob said. "No, it's the other way around, sir. She tamed me from the first!"

Mr. Holdon laughed and sneezed and swore. He leaned closer to the son of his old friend, Senator Allison, and whispered guardedly.

"Well, here's a little advice, Bob," he said, winking. "Don't let her tame you too far, or she'll run over you like she has done to me! I've been a victim to her every whim, Robert. Make her eat out of your hand. You can do it!"

* * * * *

Time passed swiftly, perhaps too swiftly, for Commander Bob Allison and Joan Holdon. They spent five delightful days taking in the sights offered by beautiful San Diego, the great metropolis of the southwest. And many leisure hours were spent under the spreading boughs of the Spanish willows in Balboa Park.

Meanwhile Bob's strength rapidly returned. Each day he took his exercises, and Joan, with a sudden desire for the strenuous motions, joined him. Together they went through the routines in the modern gymnasium in the Lindbergh Aero-Hotel. Delightful hours spent at Mission Beach and at Coronado caused Bob's pallor to flee and a deep tan to take its place.

Then the day arrived for the flight from San Diego to Kitty Hawk across the continent, in Joan's little hummer plane. They took off on a bright morning and by midday were winging through Middle Western skies in well established airlanes. Overhead raced the giant leviathans of aerial commerce. Great freighters laden with cargo, luxurious liners filled with passengers, scudded in all directions through the air.

It was the year 1980 and aviation had grown to far greater proportions than had been predicted in the earlier days of flying. Years before, railroading had been abandoned as slow and unprofitable, and the transportation companies had hurled themselves wholeheartedly into the field of aerial transportation. The world demanded speed and got it.

Bob watched a huge leviathan of the upper reaches scudding westward at a terrific clip. It looked like some gigantic kite racing through the heavens, unleashed, before a driving gale. The muffled roar of its giant screws reached their ears like the throb of thunder as it passed high overhead. It was one of the new liners recently put into the air by the Globe Circumvation Company, and was headed from the Atlantic coast to the Orient without a single stop. Quickly it vanished and those in Joan's plane turned to other interesting sights that marked their journey across the country.

CHAPTER II

A Dangerous Mission

CHIEF COMMANDER BARTLEY, stormy old petrel of the Kitty Hawk Division, American Air Forces, looked up from a pile of papers that lay upon the desk in his private sanctum at the "catbird airyards," and scowled. Around him sat a group of hard-faced young men, making up the commanding personnel of the *Annihilator II*. He waved a tricolored paper over his head, glared at Commander Allison and swore under his breath at the others.

"Look at this, gentlemen!" he snapped loudly. "Look at this! Here's an order from Washington detailing the *Annihilator* to the North Pole to investigate the disappearance of a bunch of Swedes who went there looking for a place to plant their flag! For the life of me, gentlemen, I can't understand some of the crazy orders that come from those nincompoops behind roll-top desks at Washington! Now they order me to send the *Annihilator* to the pole when they know full well that she has not undergone her final tests! The bureaucratic idiots! It is my honest opinion that some of those men over us ought to be holding down muckers' jobs instead of responsible positions where they can sling men's lives around like so much ballast!

"Look at the *Annihilator!* That's the result of Washington's orders! Rankin would not have taken the ship through the up-draft region had he not been instructed to do so through me by those nincompoops at the Capitol! Now I've got to send you boys out to look for a needle in the haystack just because the Swedish Government has asked us to search for its crazy explorers! It's hell, gentlemen. . . ."

While Chief Commander Bartley glowered and hovered perilously close to the brink of insubordination, Commander Allison, looking as clean-cut and trim in his new uniform as a tailor's model, bit his lip abstractedly. Like all of the officers of the air forces, he understood the seeming inefficiency of some of the internal bureaus through which they were subject to many inconsiderate orders. But Commander Bob Allison was not thinking of bureaucratic nincompoops. He was thinking of those poor devils lost in the desolate wastes of the vast, worthless regions under the northern lights, and of Joan.

He had not expected to be sent with the *Annihilator* to such an out of the way place, with the date of his wedding drawing so near. What would Joan think about it? He wondered if he ought to resign his command and go to her, letting someone else worry about polar blasts, ice-fields and arctic blizzards. He might be gone for months . . . might never return. Men have been lost forever in the arctic, even as the Swedes probably were now. Few ships, air or water, had been built to stand the strain.

But Bob Allison was not the kind of a man to quit in the face of peril. Deep within him, he felt an urge of adventure, the old flame which had drawn him into aviation from his early youth. He decided that Joan would have to wait until he returned. But the thought irked him and finally he cast it out of his mind, burying it in thoughts of personal duty to mankind. The

lost creatures were men, flesh and blood like himself, and were therefore deserving of the respect of their fellows.

"Well, Commander," he said rising stiffly to attention, "I await your orders, sir! We shall start at your command, sir!"

Chief Commander Bartley, scowling into the papers on his desk, lifted his eyes and surveyed his subordinate, frowning; then pounded his fist on the arm of his chair.

"I've a damned good notion to wire those idiots in Washington to go plumb to hell, commander!" he growled blackly. "But it would do no good! You'd have to go anyhow or . . . resign, sirrah!"

"I had no thoughts of resigning, sir," Bob lied glibly. "In fact I'd welcome the chance to put the *Annihilator* through such a rigid test. . . ."

"You would, eh?" the old man snorted, calming. "You would, sirrah?"

"Yes sir!" Bob saluted stiffly.

"Then by God you can go right ahead and do it!" the Chief Commander snapped, his eyes flashing with a trace of admiration for this newly installed officer. "But if you never get as far as the North Pole or even the Arctic Circle, don't tell me about it! Thank God I'm not responsible for you, gentlemen. Good-luck and good-day, sirrahs!"

For several days the world's presses and televisions had told the world a graphic tale of tragedy at the northern extremities of the earth. Twenty Swedish explorers had gone to the north polar regions a year before to hunt for a new and undiscovered land under the aurora.

They had set out from Skjangli near the northwestern frontier of Norway, expecting to return in the spring of the next year. The Swedish government had graciously turned over to them one of its finest scientifically equipped airliners, and they had set out to establish an operation base on Markham Island, the northernmost outpost of Greenland on the fringe of the Lincoln Sea. From there they were to scour the polar regions in one of the most extensive explorations in the history of arctic conquest.

One day in the spring Sweden had received word that its scientists had ended their research and that the liner was heading back toward Skjangli with very important information and new land for the nation that had made the exploration possible. Radio-television, mounted in the R-T room of the liner, informed the world that a very startling discovery had been made. But details were lacking, probably because the scientists withheld them until such times as the Swedish government decided to give out the news.

The Start!

THAT was all the world had ever heard from them. Then a frantic appeal had been sent out by Sweden asking the United States to help them rescue their scientists. Whether they had been grounded by a storm, nobody could tell, but that was generally conceded by American polar explorers to be the case. All agreed that their liner had crashed with tragic results, destroying lives and possibility of further communications.

It was a well-known fact that their provisions were perilously close to being exhausted. Two men, left at Markham Island, informed the world through a low wave radio-television broadcasting set, that their fellows would starve in less than thirty days unless help came to them. Just where the liner might be, the two men could not say, other than that the leader of the expedition had informed them that they were camped, before taking off to return home, at what they claimed was the *real geographic North Pole*, a spot which no known human being had ever located previously.

That bit of news caused many scientists to shake their heads incredulously, for during the years between 1935 and 1980, men had gone to the north and south polar regions and returned with what they declared were complete maps. How, then, at this late date, could the Swedish scientists discover some new land that did not exist on the allegedly accurate maps? Perhaps certain floes had melted; and it was quite unlikely, they believed, that a new land was revealed. At any rate, the men were lost and the *Annihilator* had been hurled into what Chief-Commander Bartley termed a mad search.

In consequence, Kitty Hawk suddenly became the scene of much activity. Men scurried hither and yon performing the duties incident to the taking off of the *Annihilator II* to search the arctic regions for twenty lost explorers. Elevators droned under the weight of provisions as foodstuffs and supplies were shot into its huge belly to be stored away for the officers, crews and additional men, should they locate the missing scientists.

Great stores of fuel, in the form of *crusite* powder for the ship's rocket driving exhausts, were placed in protected bunkers on the fuel decks. A thousand and one details had to be looked after in preparation for the first real flight of the sister ship of the destroyed *Annihilator I* in which Commander Bob Allison and hundreds of others had come so close to losing their lives.

Commander Allison, with a staff of alert, stiff-backed officers, attended to everything, supervising the loading of the supplies, arranging crews and what-not necessary for a polar flight. As an additional precaution against unforeseen polar dangers, the young commander invited several American scientists and explorers to accompany them. His request for scientific help was immediately granted when he asked Chief-Commander Bartley to make his desires known in Washington.

Kitty Hawk was in fever heat. Every minute of time was needed. When the ship was ready, newspaper men with cameras and television-news operators were on hand to pay glowing tribute to the *Annihilator II* and its commanding officers. Commander Bob Allison received his share of the publicity, though he cared little for it. He was, to begin with, a great hero who had fought to the last to keep the *Annihilator I* from being pulled into the distant skies beyond the influence of gravity while in the grip of the deadly up-draft near Denver. All this was recalled by newspapermen. With it went the news that he had been given the rank of commander and would have full charge of the *Annihilator II*.

Then Commander Allison stood on the enclosed bridge just over the control cabin in the *Annihilator's* geometrically-shaped nose and gave orders for the take-off. Far below him he caught a glimpse of Joan and her father standing on the fringe of an excited crowd. Her face was hidden behind a handkerchief, but her father was appraising the ship intently.

Allison felt a pang of remorse when he looked down upon his betrothed. She had not objected to his going to the North Pole or anywhere. Instead, she had urged him to do his duty, vowing to wait for him until the sun sank forever. But he wondered, as the *Annihilator* rose vertically, if he would be as fortunate in returning to her this time as he had been from the disastrous flight of the craft's sister-ship.

Northward Bound

OUTWARDLY, there was little difference in the appearance of the *Annihilator II* and that of her junked sister. But internally, the new craft had incorporated many radical changes and improvements including up-to-the-minute devices in case of a repetition of the former craft's destruction. Science had learned many things in the meantime.

Where the destroyed craft had been built to nullify gravity only to a certain degree, the *Annihilator II* was capable of almost entirely overcoming the earth's gravitational influence. Had this been within the power of the former ship, the disaster might not have occurred, for she could have gone above the air-streams that had held her, and returned to earth at will. As it was, she could repel gravity only up to a certain altitude, then hover under its influence, unable to rise further.

But when government scientists and engineers had finished the *Annihilator II*, they pronounced her capable of overcoming gravity to the extent that interplanetary travel was not at all beyond the realms of possibility. Through the installation of more powerful dynamos that supplied the electro-magnetic power for her great, cobalt-steel hull, she could rise to almost unlimited heights, falling away from the globe without interference from its gravitational forces.

As a precaution against unforeseen obstacles in the generation of electro-magnetic power for gravity nullification, the *Annihilator II*, like her sister, contained a set of safety airfoils that extended outward from the hull. In the event that the forces within her that nullified gravity should suddenly or unexpectedly fail to operate, throwing the ship under the influence of the earth's pull, these airfoils could be utilized for gliding. But there was little fear of a disaster of this order, for the ship contained dual dynamos with one unit held always in reserve.

In the field of propulsion, the great ship departed abruptly from all others outside of her class. She contained a powerful rocket drive system, using *crusite* powder as fuel for the internal combustion chambers. This powder was fired in relays, creating a tremendous force that hurled the ship through the air as the spent gases were vented through a series of exhausts.

As for the remainder of the *Annihilator II*, she was precisely the same in general construction as her unfortunate sister ship. At the geometrical nose was the control cabin. Above this, surrounded by observation exposures of thick quartz, was the bridge from which the commanding officers sent their orders by radio-television to even the remotest corners of the craft. Now, as Commander Robert Allison stood on the bridge with a group of subordinates around him and watched the rapidly diminishing forms of the spectators, the *Annihilator II* shot swiftly skyward. Already the drive exhausts were hissing with potent, thrusting energy, and, as she rose higher, dousing her hull in a bank of mists, she began to move northward.

At 60,000 feet, she was scarcely visible to those who stood upon the ground and watched her depart, held in breathless awe by the glorious sight. She emerged from the mists and the sun struck her broadside as the drive exhausts vomited long jets of blazing fire. Those on the ground saw her hull glisten in the sun. She hissed across the heavens like a meteor, gaining altitude as she went.

Commander Bob Allison stood at the radio-television broadcast and receiving set on the bridge of the *Annihilator* and spoke calmly into the speaking piece. His voice and image were carried at once to the control room.

"Take her up to ninety thousand, Lieutenant!" he ordered. "Set your course due north for the geographic pole; then open her up!"

Lieutenant Berger, sitting calmly at the main control, peered into the calm features of Commander Allison in the oval television screen resting among the instruments on the board in front of him.

"Yes, sir," he nodded, smiling grimly, his features hard-set.

He moved slowly a small wheel that lay in the center of the control and regarded his instruments. The altimeter needle was turning swiftly to the right. He checked its readings mentally and then snapped the wheel into the 90,000 notch. The altimeter needle stopped at that altitude, quivering like an arrow imbedded in a wall. He cast a quick glance at a brother officer sitting at the reserve controls at his right and grinned.

"The old man seems to have lost some of his nerve since the crack-up of the old *Annihilator*, Cameron!" he said. "He doesn't seem to be his old reckless self! If the Bob Allison I used to know was in command of this ship, he'd send her to Mars to be sure of altitude!"

Lieutenant Cameron nodded.

"Maybe he wants to be careful this time," he said, studying his instruments. "I don't blame him if he's safety-minded."

"Neither do I, Lieutenant," said Berger, increasing the acceleration, "but he ought to take her up out of the rest of this atmospheric resistance!"

"He knows what he's doing," said Cameron. "You ought to be glad that he's lost some of his old-time recklessness. I am, old sox! No need to take unnecessary chances."

"But I think he's lost his nerve, Lieutenant," Berger insisted. "We're losing time by flying in this resistance. He ought to take her up 30 miles at least! I'd like to get back home again. I've no stomach for this North Pole stuff!"

A Sudden Danger

BUT Commander Allison had not lost his nerve. Nor was he being unduly cautious. His order to fly the *Annihilator* at the 90,000 foot altitude was quite justifiable in view of his desire to put her to a resistance test before going into the rarefied regions of space where friction diminishes so rapidly. He stood before the instrument panel on the bridge and studied the maze of dials, meters and levels that confronted him. His trained eyes read them rapidly and he turned to his next ranking officer.

"She cuts the air like an arrow, Bright!" he said, growing more pleased with the performance of the *Annihilator* with each passing moment. "I think she's going to prove to be a better ship than the old *Annihilator!*"

"She's doing fine, Commander," Lieutenant-Commander Bright nodded. "I'm anxious to see what she can turn up in the face of resistance."

"She's doing five hundred now, but she ought to increase that by half against friction," said Bob. "If she's got more velocity than the old ship, she ought to kick out about a thousand miles per hour."

"Dr. Shelton, head of the science department back at the cat-bird yards, said he thought she'd do better," said Bright, cocking an eye at his superior. "He gave her velocity in the rarefied regions as unlimited."

Bob nodded and gave an order into the speaking tubes of the ship's communication apparatus. Almost at once they felt the *Annihilator* lurch ahead under added force, and her speed increased swiftly until the dials indicated that she was clipping off 900 miles per hour flat. The velocity indicator paused there as the *Annihilator* raced northward, passed over the United States Capitol, left it behind like a white mound, and settled down to her great race to the pole.

In gradual ascents, she was lifted high above the commercial airlanes and gradually the details of the land below became only a blur. Then a blanket of mist shut out the earth for a time as completely as though it did not exist.

Commander Bob Allison remained at the instrument panel. Few orders were necessary now. Every man within the *Annihilator* knew his business and attended to it with regulation precision. Occasionally Allison studied the jets of pale blue flame that shot from the craft's exhausts, hissing ominously like some prehistoric carnivorous reptile of the air. Then the mist cleared and he found himself staring down upon the towering obelisks of New York City. They looked like toothpicks stuck within a web of hair. He had given an order for the ship to swing a trifle east of its course to pass over Gotham. No time was lost; he wanted to give its seething millions the thrill of seeing the craft blazing through the upper reaches like a glistening needle. But New York passed almost suddenly out of sight and the *Annihilator's* nose was swung due north again.

As the Great Lakes stood under his feet like little puddles of water surrounded by the snow-clad cities and open areas around them, Bob noticed a group of peculiar white lights, visible even in the light of midday, a few points off the port stream-lines. They seemed like tiny pin-points but were growing in size gradually and he looked quickly at the meteorometer. The needle was jerking spasmodically to port, and he gasped.

The growing lights were fire-balls and he calculated that, with the velocity of both the *Annihilator* and the celestial missiles, they would come into each other's right-of-way within two minutes. Instantly he grabbed the speaking tube and yelled into it tensely.

"Pull her down to a hundred thousand feet, Lieutenant!" he snapped. "Fire-balls off the port!"

With a feeling of nausea in his vitals, he felt the *Annihilator* drop like an express elevator. A rapidly approaching roar told him that the blazing missiles were coursing overhead to smash into the Earth somewhere or continue on around it. He seemed to feel the electromagnetic energy surging through the *Annihilator's* cobalt-steel hull, and the falling sensation ceased slowly. She had dropped out of the path of the missiles and was coursing northward again in the heavier atmospheres.

Commander Allison might have turned all the details of direction over to his staff and taken himself to the comfort of his own well-appointed cabin, but he preferred to remain on the bridge. He did not believe himself any more capable of handling the flight than any of the others of his staff, yet he derived certain pleasure from standing on the bridge of his very own command to see that every detail was carried out to the perfection that made the United States Air Forces supreme the world over. Being the young man that he was, there were particular thrills in the flight that held him tensely at the instrument board, occasionally watching the snow-clad world below him pass by.

Finally he issued the order for the craft to rise again to the fifty mile altitude. She went up rapidly as the gravity repellent shot through the hull. He watched the scenes below merge into a jumbled nothing. Clouds and mists, storms of snow and rain surged below, finally hiding the earth entirely.

CHAPTER III

The Deserted Men

THE Hudson Bay, according to the ship's instruments, lay under the *Annihilator*. Bob checked his charts and with a pencil marked the course. In another hour the *Annihilator*, under her present velocity of 1500 miles per hour, would be across Canada and the Northwest Territories. Then she would be entering the desolate wastes of the far north. From then on a close watch must be maintained for traces of the lost explorers.

Thin coatings of frost had already begun to mar the quartz in the observation panels. Inside the *Annihilator* it was as warm as toast, the heat coming from a ventilation system which carried warmth from the hot combustion chambers. The officers had long since removed their "monkey suits" with fur-lined interiors, and were comfortable enough in the trim jackets, boots and breeches of their respective ranks.

Commander Bob felt a sudden impulse to communi-

cate with the two men the Swedish explorers had left behind at their base on Markham Island. He picked up the speaking piece of the ship's communication instruments and got in touch with the radio-television operator, ordering him to communicate at once with the two men to learn if any word had come from the lost scientists.

The operator called the commander presently and Bob had a glimpse of a haggard face in the bridge television screen. The fellow wore a long beard that almost completely hid his worn features. He was blowing blasts of steam from his lips as he spoke. He looked like some shaggy brute, savage and ready to snap.

"Markham Island?" Bob inquired, staring at the man's features. The fellow answered in fairly good English.

"Yes, sir!" he said. "Markham Island operation headquarters, Swedish Polar Expedition."

"Any word from the lost men?" Bob asked. Lieutenant-Commander Bright looked over his shoulder into the screen.

"I've picked up some faulty messages that I could not understand, Commander," the shaggy one said, breathing excitedly. "I don't know where they come from, but my direction indicator pointed toward the polar cap. I thought I caught my name mentioned, but it might have come from one of the rescue ships already on the field."

"Oh, then others have beat us, eh?"

"Our government has had several planes and ships in the vicinity for weeks, sir," he said. "The *Annihilator* is the first alien craft to appear. Have you got any medicine aboard, sir?"

"Yes, why?" asked Bob.

"My partner is down flat with pneumonia and I can do nothing for him," the man groaned. "I'm all alone and not feeling any too well myself."

"We'll drop a serum to you on our way over," Bob said.

"That's fine, sir," the man at the outpost smiled, "But can't you pick us up instead?'

"I think it best for you to remain where you are, mister!" Bob asserted. "Your men might communicate with you. I can't spare a relief. You'll be all right."

"But I'll go insane staying here alone! My partner is raving!"

"I might pick him up, but you'll have to stay," Bob insisted. "We'll take you on later . . . in a couple of days if not before. But say, what the devil's wrong with your face? What are those red marks under your eyes?"

The man gasped and ran a nervous hand over his exposed cheek bones.

"Red marks?" he said, weirdly. "My God! Have I got it?"

"Got what?" Bob snapped.

Lieutenant-Commander Bright nudged Bob and whispered.

"The man's got small-pox, Commander!" he said. "Bet his partner is down with it!"

Then the man spoke again.

"I might as well tell you, sir," he said, "that my partner is down with small-pox! He must've got it from a band of Esquimaux that passed by here a week ago. We bought some walrus blubber from 'em!"

"Then I'm mighty sorry, old timer," Bob said softly, "that we can't pick either of you up. But we'll drop medicines and serums for you. Hard luck! It's against orders to take on anything like that. Stand by to pick up the delivery!"

Commander Allison swung from the screen and picked up an intercommunication tube. He pressed a button beside the oval screen and waited for the hospital attendant to answer. The medico's face appeared almost at once.

"Prepare a chest of small-pox serums to be dropped overboard at once, doctor!" Bob ordered crisply. "Have it delivered immediately to the bridge!"

The *Annihilator* turned her nose slightly north by northeast across the arctic archipelago known as the Parry Islands, and headed for Markham Island, lying off the northernmost extremities of Greenland. She opened her exhausts and pressed against a head-on gale that was sweeping down upon her in a terrific blast. For a half hour she shot across the bleak wastes scarcely more than 40,000 feet up; then she dropped down to 20,000.

The Arctic Ocean was frozen over and covered with snow. There was not a sight of land to be had from any side; the whole thing looked like a great field of ice, packed and caked into a rugged, awe-inspiring mass. Eagle-eyed observers, standing on the warm bridge, studied the scene under and before the *Annihilator's* nose through powerful telescopes for a glimpse of a snow-clad shack.

Allison Decides

IT was a difficult undertaking, even through telescopes, to find a tiny ice-covered hut nestling snugly on a bleak, white world. And the added interference of a howling blizzard served to increase the observers' apprehension and their growing doubts of locating the outpost which contained two suffering remnants of a once seemingly indomitable scientific expedition. But finally it was spotted, mapped and logged. From a 1,000 foot altitude the shack looked like a tiny square of dirty white standing out in base relief from the general surface of the ice fields. Smoke from a chimney had showered the roof with a smudge breaking the monotony of endless whiteness.

The *Annihilator* slowed its velocity, circled over the hut at a low elevation and whirled its sirens. Almost at once a fur-clad figure emerged from it, shielded his face from the blasts of snow and ice and cutting winds, and looked up. Then he waved his arms wildly, insanely.

Commander Allison watched him standing below, waist-deep in snow, and felt a pang of pity for him. The two men must have suffered untold agonies of privation here on this bleak, snow-swept island, and now one was down with small-pox; the other threatening to drop at any moment. He looked at the medicine chest lying on the floor of the bridge waiting for some hand to drop it through the life-saving chute which yawned under a beryllium hatch-covering. Undoubtedly both men would die even with medicines, before they

might return. It was certain that the man standing in the blizzard would go down. Then without help they would both die of starvation if not from the ravages of the dread disease.

Bob's features suddenly became hard and his eyes flashed decisively. He shot an order into the tubes and turned to the warrant officer.

"Rogers," he snapped, "have the chief quartermaster send out a land party to bring in the two men! See that they are inoculated beforehand. Have the two men from the hut placed in solitary confinement and have Doctor Riorden attend to them!"

"Yes, sir!" the man saluted, striding swiftly to the speaking tubes.

The *Annihilator* settled slowly toward the ice, one of her great airfoils sheltering the tiny hut that lay under it. There was a general scurry of activity in all quarters as men were detailed to bring in the afflicted men. From the bridge, Bob and his staff watched the man dancing joyously in the snow. He turned to Lieutenant-Commander Bright and swore.

"It's against orders, Bright!" he said, "but I'll be damned if I'll leave those poor devils here to die! I can't see how they can spread the disease if measures are taken to prevent it!"

"Amen!" said Bright. "It would be a rotten crime to let 'em rot without help! It's a white man's act, sir, to take 'em aboard. But what about a relief? Are you leaving the radio station in the hut unattended?"

"No, I'm going to ask for two volunteers from our radio-television crew, and let them take care of the outpost until we fly over again," Bob said curtly. He turned to the warrant officer again.

"Rogers," he said, "have your R-T crew report to me at once!"

While Warrant Officer Rogers was relaying his orders, Bob watched the outpost attendant fighting madly through the snow to reach the *Annihilator*. He stumbled many times, got up weakly, and struggled onward. Then a squad of men from the *Annihilator* was seen plunging toward him. He collapsed in the snow just as they reached his side, and was placed upon a stretcher and carried out of sight. The remainder of the squad continued on to the hut and vanished within it. They emerged presently carrying a still form.

Commander Allison turned away to appraise a group of R-T men lined at attention on the bridge.

"Men," he said, "bringing those two scientists aboard has left the outpost unattended. It is important that it be kept open in case the lost men try to communicate with it by radio. I want two volunteers to relieve them until we determine whether or not the lost members of the expedition live. Who will remain behind?"

Instantly the entire group stepped forward. As one man, they all volunteered, despite the fact that none of them harbored a genuine desire to be left like ice-particles on the vast, unknown, frozen wastes.

Commander Bob Allison, knowing many of the operators personally, expected just such a move. He chose two. The men saluted with pleasure.

"That's fine, boys!" he said, temporarily shunning the dignity of his rank and striding forward. "It won't be for long, men! Good luck to you both!"

The men shook hands and were dismissed. At the companionway leading from the bridge down to the main promenade deck, one turned and waved. The youthful commander nodded and returned the salute.

As a precaution against the spreading of the disease, every man on board the *Annihilator* who had not been recently vaccinated, was subjected to an inoculation of small-pox serum. Then the *Annihilator* rose a thousand feet and began a slow ziz-zagging course toward the geographic north pole.

Was It a Dream?

THE blizzard increased in fury until the wind shrieked along the stream-lined hull of the *Annihilator*, drowning the moaning hiss of her exhausts. Particles of ice smashed against the observation exposures and the going had to be slow to maintain a close lookout for traces of the lost explorers.

At times the craft was sent so low that her glistening, frost-coated bottom scarcely cleared the jagged ice that piled high in mountainous shapes. On the great ice field they eventually came upon a snowed-in Esquimaux town. The craft paused, shrieked its sirens, and went on after a reasonable delay. There were no white men in the little circle of igloo huts; there was nothing to indicate even that life existed in the ice-clad town. But those on board the *Annihilator* knew that the inhabitants were content to remain within their mound-shaped dwellings, protected against the terrible blasts that swept down upon them from the North. Had white men been there, they would have exposed themselves at the first whining sound of the *Annihilator's* ear-splitting sirens.

The great airship swept over the desolate wastes at a velocity of little more than fifty miles per hour now. Only one of her exhausts belched a throttled stream of flame. Below, the scenes remained unchanged. Vast fields of unbroken desolation lay on every hand, staring lifelessly at the leviathan of the air.

Gradually the blizzard subsided as the *Annihilator* cruised steadily northward in sweeping zig-zags. Tense observers stood on the bridge and studied every mile as it passed by, but they saw nothing but occasional wolves, great, scraggy creatures that almost merged with the harmony of the north. One pack, hunger-crazed, raced over the ice under the ship for miles, like sharks following in the wake of a doomed vessel.

Crews were changed with clock-like regularity in the *Annihilator*, but Bob Allison remained on the bridge for a long time. Suddenly one of the men yelled jubilantly and pointed downward. Bob grabbed a glass and studied what appeared to be the wreck of an airplane partially covered with snow, the tip of an airfoil showing and a tail sticking up in the air at a sharp angle. He observed a thin wisp of smoke curling upward from the wreckage

Instantly the *Annihilator* shut off her exhaust and hovered, finally settling on the ice beside the wrecked plane. All hands were turned to at once, and the plane was surrounded by a group of eager men. But to the intense chagrin and disappointment of the *Annihilator's* officers and crew, it was discovered that only one man out of the plane's crew of eight, was living! They found

him squatting, half-frozen, before a small fire fueled from the wreckage. The others lay dead around him, stark proof of the failure of one of the Swedish rescue planes that had set out to find their brothers.

The man's features were ghastly. Pieces of flesh hung down from beneath his eyes, cracked off by the killing frost and cold. His fingers and toes were black, dead things and had to be amputated in the *Annihilator's* surgical chamber. The dead men were buried in holes dug in the ice and covered with the motors of the plane as a precaution against the predatory creatures of the polar wilds.

Following the discovery of the unfortunate rescue party, Commander Allison sought the solace of his cabin, undressed and retired. But he had no more than gotten well to sleep, it seemed to him, than he was awakened by Lieutenant-Commander Bright. The ship's barometers had fallen to zero, creating alarm and apprehension among the officers who were aware of what the drop in the recording of the storm instruments meant.

But what held Commander Allison's eyes riveted ahead was a vast body of water, open and free from ice. It was rolling gently like some great inland lake. He turned presently and studied his charts, suspecting that the *Annihilator's* speed had been increased during the night, taking her well away from the north polar regions. But he was amazed to learn that she was flying as slowly as before, and was over the geographic pole!

He looked again at the rolling body of water, rubbing his eyes. Had he suddenly been transferred in his dreams to some strange magical land? A great bird, with a wing-spread of a dozen feet, flapped across his vision toward the distant horizon. Was it possible that such a bird could be flying serenely over the North Pole? But there it was, nevertheless, and those on board the *Annihilator* were stunned by its sudden, unexpected appearance.

CHAPTER IV

The Pole or the Tropics?

PROFESSOR MARBLE, head of the division of vertebrate mammals of the Johnsonian Institution, stood beside Commander Allison. On the other side of him was Dr. Ralston of the same institution, from which the government recruited its staff of scientists to accompany the *Annihilator*. They were studying the bird through powerful glasses. They saw it hover on the horizon for an instant and then dive suddenly out of sight!

"That was a species of bird that has long since been extinct, to our knowledge!" Professor Marble exclaimed. "It was a pterodactyl or I'm as crazy as a loon!"

"Pterodactyl is correct, professor!" agreed Dr. Ralston. "Mighty strange, but correct! I can't believe it!"

"But what about this body of water, gentlemen?" Bob asked blankly. "My charts don't show any bodies of water this far north, and besides, they give our location at exactly the spot where the true geographic pole ought to be."

Professor Marble looked at the commander intently, and then blurted out:

"Are you sure you read your charts correctly, commander?" he asked.

Bob's face reddened under his tan, but he smiled easily.

"I've been reading charts too long, professor," he said quickly, "to make such an error!"

"There's no mistake, professor!" said Lieutenant-Commander Bright. "We're over the true pole right enough, but there seems to be a nigger in the woodpile somewhere! I've been on the bridge for hours, and we've maintained our course straight for the pole!"

"But this water and the bird, gentlemen," insisted the scientist, "are completely baffling. If we are at the true pole, then other explorers have erred, because we have no record of a body of water this far north. And it's warm water, too!"

"Reminds me of Marshall B. Gardner's theories of a temperate zone in the arctic," Dr. Ralston interjected, "but of course little credence has ever been placed in that. In his book he contended that the true pole had never been discovered!"

"But that's not altering our situation, gentlemen," said Bob. "We're either at the North Pole or we're not. I confess that I'm mystified. The whole thing is a mystery beyond my powers of comprehension; the lake, the bird and what appears to be an overcast, semi-tropical country!"

"Well, there must be some sort of land just beyond the horizon," said Professor Marble, "otherwise that bird would not have plunged straight down. The pterodactyl is a land bird, not an amphibian. I suggest that we cruise along over there and investigate. Perhaps our missing men discovered this mystery and went further to look into it and became lost somewhere beyond."

"That's a logical idea," said Dr. Ralston.

"Then we'll go over and have a look!" Bob nodded, turning to Bright. "Change her course north by northwest, Bright!"

A Strange World

AS the *Annihilator* proceeded on her new course, those on the bridge were treated to a strange sight in the water below. From an altitude of several hundred feet, the water in the mysterious lake appeared as transparent as a great sheet of thick glass. They could see great schools of fish churning through the water on every hand. Frequently huge water mammals blew the surface and they caught sight of tremendous snouts and great, spread jaws. The water was fairly alive with organisms of one sort or another. Immense shoals of savage-looking fish swam, feeding, in the wake of retreating schools. Then they had a glimpse of a great sun that seemed to rise in front of the ship. It literally popped up and stood in the heavens a few degrees above the horizon.

Commander Allison ordered the *Annihilator* directly into the sun, for it lay in the course taken by the huge bird. Speeding in that direction at a velocity that was now little less than 200 miles per hour, the *Annihilator* went hissing over the great lake like some huge bird of prey. Gradually the water became more shallow as they could easily see from the altitude, and presently it lapped

placidly on a shore that was lined with tropical vegetation. Had they been flying around some inland sea along the equator, they could have been in no more tropical territory than that which lay spread out before their eyes!

Great flocks of vari-colored birds scattered before the huge leviathan of mankind and took refuge in what appeared to be an impenetrable jungle. The sun still lay ahead, just above the horizon, casting warmth over a tropical land that lay beneath its beams. Was this ball of fire the central sun in the interior of the earth, as theorized, back in 1920, by that brilliant scientist Marshall B. Gardner, whose interesting book* had sought to prove that the poles had never really been discovered? Was this great ball of fire the flaming core of the earth or was it actually a central sun spraying an interior world with life-giving properties?

Professor Marble found himself speculating upon these thoughts as the *Annihilator* continued across the matted jungles that lay under her belly. It was very hard for him to concede that Gardner's theories concerning an interior world within our globe were correct. He recalled the famous book and reasoned that the theorist had offered a sound enough argument, yet it was hard to believe that within the confines of the icy north a tropical land could exist, teeming with a life that should have passed out of existence thousands of years ago.

Great birds with membranous wings and long, saw-toothed beaks took wing from the higher rocks in the jungle and flapped slowly away at the approach of the *Annihilator*. Marble finally decided, as the ship slowed down its velocity for an investigation into the mystery, that here was some great valley that the passing of centuries had in no way affected with a change of life. But how could such a valley exist at the North Pole? By the time the *Annihilator* grounded her gear on a flat, grassy meadow in the heart of the strange, teeming jungle, Professor Marble began to concede that there might be something after all in Gardner's theories. And before the search for the lost Swedish scientists had come to an end, he was destined to credit those theories whole-heartedly.

There has always been something of a mystery surrounding the discovery of the huge ice-encrusted mastodon by the Tongoose fisherman, Schumachoff, in the Arctic Circle. Professor Marble, like many another scientist, had marveled at that discovery of the mammoth held in a perfect state of preservation by a refrigeration of ice, and had wondered whence it had come. Now Marble and the others on board the *Annihilator* were seeing with their own eyes the very jungles that had undoubtedly reared that same mammal countless centuries before.

As the *Annihilator* shut off her exhausts and her officers prepared a scouting party, those on the bridge saw a herd of huge, towering mastodons thundering away from the meadow. There must have been fifty beasts in the great herd, their long, up-curling tusks standing out before their heads, shoving small trees aside as though they were match-sticks. The thunder of their pounding feet caused the earth to tremble as they stampeded away.*

But would the lost Swedish explorers be found in this strange world? It was only natural for Commander Allison and those under him to believe that they would be! Word received by the Markham Island base of the expedition had told that the scientists had been camped at what they said was the true North Pole. Perhaps they had encountered the mysterious open lake and had followed it until they found themselves lost in a strange, tropical domain. Bob had little doubt that they would be found somewhere in the teeming world and he was now prepared to search for them.

Exciting Moments

HAD he been an older man and less imbued with the spirit of adventure, he might have placed a subordinate in charge of the scouting expedition and taken himself to the safety of his cabin. But Bob Allison had a desire to be in the thick of things, especially if adventure beckoned. And adventure called him strongly; he could not resist going at the head of the party into this strange land on whose every side strange beasts peered at the invaders.

Armed to the teeth with powerful rifles that shot explosive projectiles, they crossed the meadow in the direction taken by the herd of mammoths. Keen-eyed observers had spotted, in the valley beyond, what appeared to be the tail sections of a wrecked airship. There was no way of telling exactly what it was when the *Annihilator* flew over it because of the harmonious color-scheme of the jungle. And the wreckage had appeared smoke-blackened, leading Bob to believe that the Swedish ship had crashed and burned on the spot.

At the head of fifty armed members of his crew, and flanked by Professor Marble, Dr. Ralston and Lieutenant-Commander Bright, Bob led the party down into a ravine to the edge of a swamp. A huge dinosaur stood in the center of the pool, lapping lily-pads as unconcernedly as a domestic cat drinking milk out of a saucer. The beast looked up calmly and scrutinized the party, then lumbered away, its great reptilian tail swaying from side to side.

"Good Lord, commander!" ejaculated Professor Marble, trembling with excitement. "That was an herbivorous dinosaur! Why, from all understanding of modern science, that beast should have been extinct for a million years! What do you think of it, Dr. Ralston?"

Dr. Ralston stood at the edge of the swamp and studied the huge dinosaur tracks, exactly like those preserved in the asphalt beds of Wyoming and Nebraska;

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* "A Journey Into the Earth's Interior" or "Have the Poles Really Been Discovered?" published in 1920 by Marshall B. Gardner, its author.

* It was Marshall B. Gardner who first offered an argument as to the source of the preserved mastodon. He had fought a bitter battle with orthodox science in an effort to prove that the mastodon had come from a tropical world inside of the earth. But strangely, little faith was placed in his theories. However, there was no denying them now! The interior of the earth was a world in itself, a warm tropical world which thundered with the teeming life that on the exterior had long been extinct. It had its own sun, the flaming mass which orthodox science claimed was merely the core of the earth; it had its own lakes, its own atmosphere. The *Annihilator* had unconsciously entered it through the northern entrance, an open polar cap 1400 miles across, and was now under an 800 mile thick earth-crust upon which humanity subsisted.

then he shook his head blankly.

"Damned if I can think anything, Marble!" he said incredulously. "I can't believe my eyes. But undoubtedly the beast was an herbivorous dino!"

Suddenly the air was rent with a scream of terrible agony. Every single member of the party automatically gripped his gun. The scream was inhuman, like the maniacal shriek of some primeval beast in the throes of death. Then there was a commotion on the other side of a medium-sized pool. A horrible-looking creature had emerged from the water and grasped a small animal of the primate class, and was chewing it savagely. It was a great, ferocious marine lizard thirty feet long, and it was retreating into the water again with its victim between its saw-edged teeth. Instinctively Bob raised his explosive-throwing pistol and let fly. The pistol cracked softly but the explosion of the missile inside the lizard sent a thunderous report reverberating through the jungles.

The lizard's head was torn from its body and the creature fell to the shallow water, thrashing madly, its great tail beating the water and throwing a warm spray over those who watched. Then its death struggles ceased and it lay still, half submerged in the stagnant pool. The men went around to the other side and Professor Marble, after a brief study of the creature, declared that it bore complete resemblance to remains of such lizards taken from the chalk-beds of Kansas and Missouri.

Then pandemonium seemed to break loose! The explosion of Bob's missile had awakened the dismal jungles around them, and creatures went crashing through the matted entanglements on every side. The herd of mastodons thundered down the ravine, trumpeting in a terrifying manner. Towering dinosaurs, herbivorous and carnivorous, rose from the brush, stared at the strange creatures that had suddenly come among them, and raced away. And the pool boiled under the lashing of tremendous tails, snapping jaws and swimming water denizens, frightened by the sudden concussion.

Stupefied at the abrupt uproar and the many strange beasts around them, the party stood stock-still and stared, open-mouthed. Commander Allison, his pistol half-raised, was watching the approach of the mastodons. They came roaring down the valley toward them at a terrific speed. The ground seemed to tremble with the rise and fall of their thunderous feet. Horrifying blasts rent the silence as the herd crashed down upon the party with renewed speed.

Bob's pistol cracked again and again, and each time the crash of a giant body followed the roar of exploding missiles that mangled the beasts horribly. Then the whole party sprang into action. Rifles were lifted to strong shoulders and they belched death into the herd. But so mad was its rush that the remaining members came on like express trains, clearing the fallen beasts in wild leaps. Bob dropped a leading mammal; then his pistol snapped, empty. Rapidly the rifles cracked until half the herd lay dead or dying.

Seeing that the beasts were bent upon running them down, Bob ordered a retreat as the herd swung upon them. The party scattered immediately into the jungles to escape the enraged beasts. Bob, with his first officer Bright, sought the safety of a huge tree that swung spreading branches over the jungle level. Scarcely had they departed from the dead water-lizard than the remainder of the mastodon herd roared past and crashed away.

Commander Allison re-loaded his heavy pistol as he sat in a crotch of the tree and jammed it into his waist holster. Lieutenant-Commander Bright sat on a higher branch above and grinned, but his face was pale.

"Narrow escape, Commander!" he said, trembling "They'd have trampled the whole party in another minute!"

"I thought we could stop the stampede," said Bob, glancing below him. "But evidently there's no stopping those beasts when they get started. Quite an odd experience for a modern man, eh?"

"Odd?" queried Bright. "Odd, hell! Its stupefying, sir!"

Bob chuckled softly and looked at his subordinate quizzically.

"Not scared, are you, Bright?" he quizzed.

"Not exactly, sir," declared Bright, truthfully. "But I had a few funny sensations running through my innards when I saw that herd pounding down upon us! You could call it fright if you want to!"

"I suppose we all experienced sinking sensations, Bright!" said Bob, peering into the branches above him. "Its no crime for a man to get rattled under conditions like these!"

In the moss-covered branches above him, Bob thought he detected a slight movement like the body of a snake crawling slowly across knotted boughs. Instinctively he drew his pistol and waited. Bright glanced up, yelled and swung down from his perch. Bob drew a bead on the slowly appearing head of a giant reptile and fired. The head vanished with an explosion and the giant tree shook madly under the death-throes of a monster snake! A great green and yellow tail lashed out in a giant death-thrust. It caught Bob across the shoulders and sent him spinning into the lower branches, clutching frantically. His pistol dropped to the ground as he grasped at the twisted boughs. There he hung, gasping for breath; then let himself safely to the ground.

Lieutenant-Commander Bright was waiting for him. He had recovered the pistol and was re-loading the empty chamber.

"Hurt, sir?" he asked, handing over Bob's gun.

"Knocked the breath out of me, Bright!" he said, still gasping. "Cripes, what a snake! Must be fifty feet long!"

"You should have dropped out of the tree when I did, Commander!" said Bright. "We had plenty of time to get out!"

"I was taking no chances," Bob nodded, rubbing his shoulder and grimacing. "I'm going to shoot first around here and argue afterward! Now where the hell is our party?"

"They scattered into the brush when the herd came down upon us!" said Bright, glancing around for a sign of the men. "I haven't seen hide nor hair of one of 'em since, sir! Perhaps they've returned to the *Annihilator!*"

CHAPTER V

A New Danger

FEARING for their lives, Commander Allison and Lieutenant-Commander Bright remained for a long time beside the great tree in whose higher branches lay the still body of the monster reptile. Around them the prehistoric jungles roared with awe-inspiring life. But gradually the tumult subsided as the beasts slowly forgot about the strange sounds created by the invaders. Then the two officers of the *Annihilator* found themselves immersed in a dead silence. Cautiously they strode, side by side, pistols ready, toward the edge of the stagnant pool. The ground was mucky from the pounding of tremendous feet. The water-lizard had vanished. A commotion in the center of the pool told them that other creatures were feeding upon the remains.

Then out of the oppressive silence came a sudden, prolonged shriek of the *Annihilator's* sirens. The two officers stiffened rigidly and regarded each other in blank amazement. Almost at once there came the muffled crack of staccato explosions, finally followed by the rolling boom of the ship's high-powered rifles. From which direction the sounds came, they could not determine. The roar and crash sounded solidly around them. Lieutenant-Commander Bright stared into the tight-lipped features of his superior and addressed him.

"Sounds like a fight, Commander!" he gasped. "Maybe the *Annihilator* is being attacked by some creatures!"

"Perhaps we'd better scout around and find out!" exclaimed Bob. "Which way did we come to get down here?"

"I think we came down that bank on the other side," Bright replied, tensely. "We can follow the party's tracks back to the meadow!"

Whatever intentions or hopes Lieutenant-Commander Bright had of following the tracks of the party back to the *Annihilator* were immediately quashed when it was discovered that all boot-prints had been obliterated by the pound of animal feet. Not a human spoor remained to be observed! Frightened, maddened beasts had covered them completely, leaving not so much as a heel-mark anywhere in the muck that might direct the two officers in the direction of the *Annihilator*.

It was with the grim realization that they were lost and deserted that they started up the steep, mucky bank which they thought led to the land on which the *Annihilator* was grounded. But they fought their way up the slippery side of the slope and presently stood on a tree-covered plain. It was not the grassy meadow upon which the ship had settled, and while they stood there gaping at a huge dinosaur, that stood among the trees not far away, they realized that they were lost indeed! Bob pulled up his pistol in line with the beast's head, but Bright held his arm.

"We're lost, Commander," he said. "Better save your ammunition!"

Bob lowered his gun, nodded and jammed it into its holster. Then they studied the lay of the land around them and decided to return to the pool in hopes of finding some hidden tracks of the party.

Scarcely had they gone a dozen feet down the slippery incline when a stone-tipped spear thudded into the ground between them. They paused, amazed and bewildered, to watch the shaft vibrating like a fast-moving pendulum. Instantly they lunged for their pistols, studying the terrain below them.

What they saw on the other side of the pool caused them to recoil and crouch, horror-stricken!

Across the swamp a half-hundred blood-curdling creatures with scaly, human-like bodies and Triceratopsid* heads, stood on the fringe of the jungle and watched the crouching officers on the bank. They stood upright on two feet like a man, but their heads were the most frightful things Bob Allison or Bright had ever beheld. With a large bony armor curving down from the tops of their heads and across their shoulders, and savage, cruel eyes inserted above beastly snouts, the creatures sent stark terror surging through the brains of the two officers.

Then one of the beasts poised a spear and let it fly. It curved a graceful arc over Bob's head and buried its point notch-deep, in the soft earth. Mechanically he lifted his pistol and fired into the horde. The foremost Triceratopsian was torn to shreds as the missile from the gun exploded in his chest.

Instantly the space between the two humans hummed with singing darts. A barb scraped Bright's neck, creasing the flesh. He let out a stream of oaths and fired rapidly at the creatures below. He was an expert shot with a pistol and as rapidly as he could pull the trigger, his ears were rewarded by muffled explosions and terrible, beastly screams. But the Triceratopsians held their ground and hurled spear after spear in the direction of the death-spewing pistols.

Bob held his fire after his first shot, until Bright's pistol clicked on an empty cylinder; then he fired. Bright reloaded swiftly and by turns they sent missiles of terrible destruction into the horde in the swamp. Spears came from everywhere and then finally screaming arrows stirred up a hornets' nest of buzzing around them. An arrow went through Bob's vizor like a bullet, lifting it back on his head; then another, creased at his boot-top, glanced off and lay beside him. He glanced at it quickly. The dart was tipped with an ivory head, sharpened to needle-point and notched along the edges. It made him shiver and he turned again to the horde that seemed bent upon annihilating them.

Captured!

THE creatures were spreading out into a long line now, as though preparing to rush. They sent a stream of arrows at the two half-hidden humans, their huge bows twanging loudly, and then as by some signal, they broke and rushed. As they came, Bob and Bright retreated slowly up the bank, firing rapidly at the fast-running beings in an effort to check their rush. Arrows continued to sing around their heads, and they wondered at the miracle that kept them among the living.

Standing on the top of the incline they again paused. A barrage of darts whistled past them and they decided that things were getting too hot for them. They turned abruptly and raced headlong toward the trees. The

* Referring to a giant plant-eating dinosaur.

dinosaur had vanished, but weird forms scuttled under the branches.

The triceratopsians followed on the run. They were flanked by others now which had come upon the scene like glistening, scaly beasts of a nightmare. Bob Allison and his first officer kept on steadily toward the trees. Small animals scurried out of their path on stilted legs. They were ant-like creatures as large as domesticated cats and made strange noises as they ran.

Then as the two officers entered the fringe of the jungle, they found themselves confronted by another battalion of the grotesque creatures. From behind massive tree-trunks surged a veritable army of Triceratopsians. They came forward at once, spears upraised, and the two humans discovered that they were now surrounded on all sides by hideous, beastly beings who screeched triumphantly as they closed upon them.

Standing back to back, Bob and Bright shot rapidly into the ranks that slowly closed around them on all sides. They sent slug after slug into them, mangling horribly those who were hit. Bob hoped the others would become frightened and retreat. But the Triceratopsians refused to become frightened. Instead they fitted ivory-tipped arrows into their powerful bows and let fly, but with mighty poor accuracy.

Both men were nicked in a dozen places and blood coursed down Bright's face from a crease across his scalp. A sharp pain told Bob that an arrow had seared his thigh. But he paid no attention to it. They fired as rapidly as they could and by the time their pistols were empty, the horde was upon them.

As he was being lifted bodily onto the broad back of a frightful Triceratopsian, Bob brought his pistol down upon the creature's bony head with a menace. There was a dull thud and the creature merely snorted, while another yanked the pistol from his hand. He received a sound cuffing across the back from the fellow that had his gun, and then lay still, panting and gasping for breath. He shot a quick glance toward Bright. The first officer lay on another broad back behind him, his face covered with blood and his head hanging grotesquely to one side

"Bright!" Bob cried, apprehensively. "Bright!"

Lieutenant-Commander Bright's head moved slowly and wobbled drunkenly; then he managed to accumulate sufficient strength to raise it. Through blood-filled eyes he regarded the terror-stricken features of the commander and grinned strangely.

"I'm all right, sir," he said, faintly. "Guess I'm just weak from loss of blood!"

The creature who bore Allison turned his beastly head and looked at him. Bob recoiled from the awesome brute's breath, and squirmed to avoid it. Great hands, with three-taloned fingers and a cruel, bony thumb, clutched at him tightly and held him with a vise-like grip.

Bob shuddered and sucked in his breath.

The Triceratopsian that carried Bright, paused and shook him like a rat in a terrier's teeth. Bright emitted a groan and lay still. His eyes closed and his head hung limply. Bob cursed under his breath as he saw the body of his officer go limp. Then he heard again the scream of the *Annihilator's* sirens, followed by a series of rapid explosions. To his ears finally came a deep-throated roar. He shrank against the broad back that carried him, well-knowing what that roar meant. The *Annihilator* had suddenly taken the air! Instinctively he searched the skies over his head. Far above him he caught the flash of a glistening body. From it trailed streaks of pale blue flame. Then it vanished like a will-o-the-wisp in the distance.

The *Annihilator* had deserted its commander and its first officer! Why it had suddenly taken off and roared out of sight Bob could not guess, unless it was because the ship too had been attacked by the Triceratopsians and was forced to flee for safety. But why had she gone beyond sight? He could not see or understand why such an impregnable craft as the *Annihilator II* would flee before a lot of old-world savages. But Bob Allison was destined to learn much of this old world before he became many days older!

A Mysterious Sound

FOR what seemed an hour, Bob lay across the back of the Triceratopsian that bore him through the jungle with little effort. Frequently he glanced at the inert form of Bright. Several times the first officer had groaned and Bob wondered if he was dying. Dry blood caked the man's features and the small area of skin that showed here and there on his cheeks was as white as death.

During all this time the creatures pushed through the jungle in an arrow-point formation. The bristling thickets with their sabre-like thorns did not hinder them, merely scraping against their scaled bodies and being brushed aside. But often strange thorns pricked the unprotected bodies of the officers, causing the flesh around the wounds to become dead for a time and then to pain nauseatingly. Their clothing was soon torn to shreds and they were suffering from head to foot.

They came upon another herd, this time one of imperial elephants, grazing in an open glade. They raised their trunks and trumpeted shrilly at the procession; then resumed feeding. The Triceratopsians seemed to have no fear of the huge beasts. They went right along as though they did not exist, and Bob wondered if the trumpeting was a kind of beastly salute.

After a period of precarious climbing, the Triceratopsians traversed a low range covered with vegetation and entered a wide, open valley. As they emerged from the jungle, Bob's eyes concentrated upon the burned hull of a huge airship. It lay in a twisted mass, beryllium girders and braces standing out like the bones of some grotesque skeleton. He studied the wreckage for a moment and then gasped. A thin plate of steel lay a few yards from the blackened frame. Upon it were the serial numbers and name of the lost explorers' ship, the *Skjangli!* He twisted his head toward Lieutenant-Commander Bright and yelled loudly.

"Bright!" he cried. "Snap out of it, old man! Look at that wreck!"

Bright managed to life his head and to stare off to his right. His head wobbled and it must have been seconds before he could clear his brain of the stupor that clouded it. Then his eyes popped open with recognition.

"A wrecked airship, Allison!" he exclaimed. "It's not the—the *Annihilator*, is it?"

"You're goofey yet, Bright!" said Bob. "Take a look at that steel plate laying in the open!"

Bright stared at the square of steel for a moment and then regarded his superior officer with flashing eyes.

"The *Skjangli!*" he snapped, hopefully. "The ship of the lost men!"

"Right!" the commander agreed. "It's the *Skjangli*, the ship for which we've been searching!"

Bright nodded.

"If the explorers were in some kind of a battle with these beastly devils," he said, "it's logical to think that the victors would burn or destroy the ship to prevent them from escaping!"

"Right you are!" said Bob. "That's exactly what happened, I'll wager! Some powerful tribe annihilated the *Skjangli* and made off with the crew and passengers, even as they attempted to capture the *Annihilator*. Did you know, Bright, that the *Annihilator* has gone aloft and away—deserted us?"

Bright's mouth opened in a terrified expression. He stared at Commander Allison for a long moment and then groaned.

"Deserted us? My God, how could they take off and leave us here to be slaughtered by these devils?"

"You must have been out, then, when she went away, Bright!" said Bob Allison, frankly. "I watched her disappear in the distance. But don't forget, old timer, that we're not dead yet, and the *Annihilator* will undoubtedly return!"

"I have scant respect for the young nincompoops in command of her now, Allison!" Bright swore, groaning and nursing his neck. His hand came away from the wound covered with clotted blood. He stared at it for an instant and then spat deliberately down the back of the beast that carried him. The Triceratopsian paid no heed to the insult, but merely went on without turning even his head.

The Triceratopsians had crossed the open ground and now headed again into the brush. Allison noticed well-worn trails on every hand now, and from far away, his ears detected the throb of drums. He decided that the sound must come from some tremendous kettle-drums, for it was different from any other sound to which his ears were accustomed. The jungles were re-echoing the throbbing rumbles that sounded like steady, intermittent rolls of thunder, the beats timed to a second.

Bob relaxed his legs and arms and lay across the muscular shoulders of the brute, resigned now to whatever the future held for him. He watched the muscles play in powerful knots across the broad, scaled back of the Triceratopsian. From the neck down, the fellow was a fine specimen of human structure. But from the neck up, he was utterly loathsome.

Bob studied the creature's feet as it trod the trail. Its pedal extremities were clawed like its hands and spread out like the feet of some predatory bird. There were as many talon-tipped toes as there were fingers on his rather well-shaped human-like hands. But the claws of each could have torn a man to shreds within a minute, so sharp and terrible were they.

The Triceratopsians were a head taller than Bob, making them close to seven feet high. They swung through the jungles with the ease and grace of an Iroquois, looking neither to the right nor left. They seemed to be the supreme rulers of all the beasts of the forests, and when any other creatures were encountered in the gloom-filled forest aisles, these either hissed, snorted or bellowed, and then resumed feeding. Everything, even the great savage mastodons and the towering dinosaurs, seemed to bow to the mysterious supremacy of this Triceratopsian horde, these strange beings, half-dinosaur and half-man.

Bob wondered at this great mystery, which, to him, as a layman, was insolvable. He could hardly believe it possible for a modern man to be taken back into the dim ages of the beginning. The whole thing seemed like some wild nightmare and he wondered if he were really awake or dreaming!

But the swaying motion of the beast that carried him told him plainly that he was very much alive. And among other things, the persistent throb of thunderous drums informed him that they were getting nearer to the sounds. The thunder rolled down upon his ears more sharply now as though some giant creature stood before a mammoth drum and pounded it steadily with two mighty hammers, one in each hand.

Presently he found himself thinking of Joan. Would he ever see her again? Why hadn't he resigned his rank to carry out the plans for their marriage? What would she think when the world learned that the two commanders of the *Annihilator* had gone to their death at the hands of some terrible creatures deep within the earth? He doubted if the news would kill her, but it certainly would cast a shadow over the remainder of her life. He cursed himself for a fool for ever undertaking the venture in search of the lost scientists whose wrecked ship had already been discovered. Life certainly was cruel to him. Scarcely had he recovered from his experiences in the *Annihilator I*, it seemed, than he found his life imperiled again under even more frightful conditions. Disaster certainly hounded him!

CHAPTER VI

The Beasts at Home

EVENTUALLY the procession went down a steep incline and entered upon another flat plain. The throb of the drums was very close now and Bob studied the terrain ahead. As far as his eyes could see there was a vast flat plain with towering lush grass swaying gently in a warm breeze. Great animals grazed here and there, their heads high above the waving grass. Two dinosaurs stood off to the left and regarded them for a long moment, then raced away like gigantic kangaroos. Every bound carried them entirely out of the grass and presently they vanished in the distance.

There was a sudden, terrifying scream from somewhere close at hand. Bob's hand went instinctively to his empty holster. The scream sounded like some giant in distress, so close was it. Then he caught sight of a great ground-sloth racing madly through the grass. A large, tawny cat, with tremendous fangs protruding from its jaws, tore after it, screaming the maniacal cry of the hunting jungle beast.

From his perch on the shoulders of the Triceratopsian he could watch the race of death as the animals appeared frequently in little open patches on the plain. The great sabre-toothed tiger was gaining rapidly. Presently it paused, crouched down in a little glade to bunch its muscles, and sprang into the air. There was a terrified squeal from the victim and then the lush grass at the spot was in terrific commotion.

For a few tense moments he watched the struggle and then all became still except for the gentle weaving of the grass under the influence of the breeze. The tiger had evidently won and had settled down to gorge.

Swiftly now the horde made headway. The creatures almost ran along the wide, road-like trails before them. The Triceratopsian who carried Bob and Bright seemed tireless. They maintained the pace set by the others with little effort despite their burdens. Then suddenly the trail widened into a tremendous clearing in which stood innumerable mound-shaped dwellings of what looked like adobe mud. In the center towered one great structure above all others. It consumed an area of nearly an acre. The rest of the village was built around it in a circle, and Bob concluded, as a vast throng of Triceratopsians came forth to meet the procession, that the central structure was some kind of a council-house. He shot a quick, apprehensive glance at Bright.

The first officer of the *Annihilator* was sitting upright now upon the shoulders of his beast of burden. The Triceratopsian must have perched him astraddle of his neck so he could be carried more easily. Bright presented a strange sight, riding as though straddling a horse, on the neck of the grotesque beast, and Bob grinned. His friend seemed to be enjoying his ride now, for he had regained some of his lost strength and had managed to mop some of the clotted blood from his face. He was holding on to the creature, with his hands gripped on the curling plate of bone armor that ran from the top of his captor's head to shoulder level. His body swayed in rhythm with every quick step taken by the beast under him.

A tremendous crowd of Triceratopsians now stood in front of the procession. Half-grown Triceratopsian youngsters, grotesque little devils at best and filled with blood-lust, thronged the edge of the gathering, and picked up stones with eager hands. The mass broke suddenly and the procession entered an aisle packed on both sides by grunting, beastly creatures. Troops of youngsters fell in behind and Bob was forced to dodge small stones that were hurled at him by young hands.

Suddenly the two humans were placed on the hard-packed ground and shoved forward, side by side. The Triceratopsians fell in around them closely, as though to protect them from the barrage of stones that gleeful Triceratopsian brats were pelting them with.

"The dirty little rats!" snarled Bright. "I'd like to get my fingers on the throat of that leader . . . the biggest one of the mob! I'd certainly wring it for him!"

A small stone bounced off a Triceratopsian helmet and smacked Bob on the temple. His knees buckled under him from the numbing force of the missile and Bright held him up as a brute lifted a clawed foot to deliver him a sound kick for faltering. Bob groaned and shot a hand to his head. The force of the blow reeled him and a tiny stream of blood dribbled from his temple.

The Triceratopsians now strode so swiftly toward the great council-house that Bob and Bright, weak as they were, found it difficult to maintain the pace. Frequently the creatures behind them shoved them forward or delivered vicious kicks that at times almost sent them on their faces. Half-running, they finally reached the huge structure and were picked up again in scaled arms. Then the procession entered and Bob and Bright were unceremoniously hurled upon what appeared to be an altar in the center of the large room.

A great gathering of Triceratopsians was already on hand, sitting in an unbroken circle around the altar like an audience in a circular theater. A few feet in front of the first row of leering spectators sat a tremendous brute. He towered head and shoulders above the others and held in his claw-like fists a knotted club that was stained with vermilion. Pendants of bone dangled from the shaft and a human skull hung suspended on a cord around his stubby, beastly neck.

Beside him squatted a white-haired human, his features half-hidden behind a stained, knotted beard, his eyes flashing with the same terrible cruelty that marked the apparent deviltry of the huge creature himself! The man was naked except for a narrow breech-clout of tiger skin around his skinny, wrinkled loins. Around his waist was a cartridge bandolier and in a handy holster nestled an ancient pistol of the kind that had preceded the introduction of the modern guns that shot missiles filled with high explosives!

The Renegade

WHEN Bob's eyes fell upon the human who was evidently a white man well advanced in years, he was astonished beyond description. It was certainly strange to find a white man on intimate terms with the frightful beasts of this dawn-age jungle! And the man was sitting placidly beside a triceratopsian who, to all appearances, was the chief of the horde! It was a mystery that caused both officers to stare incredulously at the man. How did he come to be there, and how did he manage to place himself so high in the esteem of the Triceratopsians as to give him a ranking position beside the cruel leader?

Bob and Bright sat up presently on the altar and stared around them. Evil faces confronted them on every hand. The throbbing of the drums smote upon their ears with a menace, then suddenly it ceased. For what seemed a long time they sat still, staring into the cruel features of the man beside the chief, as though too stupefied to speak.

The man regarded them calmly, never moving an inch. His eyes stared like the open eyes of the dead, never blinking. Had he been an image of stone, he could not have sat more still and rigid. He seemed to be trying to bore into the very souls of the two officers, and they shuddered. After a time Bob slowly pulled his pipe from a pocket, filled it with a fragrant tobacco from a small water-tight container, and struck a match to it. Bright watched him through wide eyes as he held the match over the bowl and puffed. From

out of the sides of his eyes Bob studied the creatures around him. Their mouths snapped open in astonishment when they beheld the match flame. The man beside the chief sat as immobile as a stone figure. Then Bob addressed him sternly.

"What's the big idea of taking us captive, old man?" he snapped. "Have we harmed you or your vulgar friends in coming here?"

The ancient devil's tousled head moved a fraction of an inch, but his eyes bored straight ahead at the two ragged officers. Bob puffed on his pipe with a feigned calmness and wondered if the man understood English. Perhaps the man was dumb or long years spent with the awesome Triceratopsians had dulled his wits to any kind of human communication.

As he speculated upon the strange presence of the fellow in this remote world within the earth, he decided that he must be a lost polar explorer who had wandered across the open lake and entered the steaming jungles, over which he must now rule partly. He did not doubt that the man had lost all sense of respect for mankind. Men have been known to return to the jungle and cast all their civilized traits into the discard for the freedom of savagery.

"Well, can't you answer me?" Bob asked impatiently, putting on a bold front in an effort to bluff his way into liberty.

By the looks in the eyes of the Triceratopsians, he somehow felt that they held him in some kind of awe since he flicked his match into flame. He had read books of history in which men won freedom and safety by just such acts as striking a match at the right time, making their savage captors believe they possessed supernatural powers. That was the reason why he had lit his pipe when he did

He blew a cloud of white smoke from his lips and spat deliberately at the feet of the squatting Triceratopsian ruler. The huge fellow blinked his eyes stupidly and stared at the two captives. Then the old man twisted his leathery lips into a snarl and spoke.

"Yes, I can answer you!" he snapped. His voice seemed to come from between clenched teeth. "You have been taken into captivity by the Ruler of All who has forbidden the existence of humans in the world that cradled him! Our great chief, Hokar, master of the world within a world, makes war on all who trespass!"

"Then what the hell are you doing here?" Bright snapped heatedly. "You're a hell of a fine specimen of humanity to be in cahoots with a mob of cut-throats like this!"

"If I prefer the society of these people to your kind, it's none of your business!" the man hissed with menacing evil. "I chose this kind of beings rather than to continue living with your kind who drove me here!"

"Drove you here?" Bob asked incredulously. "What do you mean?"

Bright's eyes lighted with suspicion and he nodded at Bob.

"He's an escaped criminal who wandered north and found a way into the interior, Allison!" he sneered, glancing furtively at the man to see the effect of his assertion. The man scowled and clenched his fists tightly.

"Exactly!" he growled tensely. "But you'll never get out to tell where I am!"

"And why not?" Bob questioned, arching his brows in feigned surprise.

"Because it is the will of Hokar that you die even as others like you will die in the jaws of the Triceratops!" the man snapped.

"Others?" gasped Bob, leaning forward. He had a vague suspicion of the meaning of the man's words. Surely he did not refer to the lost explorers as the "others." Or had more of his own men from the *Annihilator* been taken?

"Others!" the man repeated. "Swedes!"

"Then you *have* taken the scientists whose ship we saw wrecked on the way here?" asked Bob.

"Hokar has set the Swedes aside for his especial pleasure!" the old man gritted as though trying to control an insane anger that was burning within him for all humanity. "We wrecked their ship when it landed, and captured the lot to fill the belly of the sacred Triceratops!"

The Sentence

"GOOD Lord, man," said Bright savagely. "You couldn't stand aside and watch your kind murdered in cold blood!"

"Don't you fool yourself about me, mister!" he scowled, stroking his stained beard with a gnarled hand. "I've enjoyed it before and I'll enjoy it again when you two smart alecs go into the jaws of the beast which these good people worship as you worship your God . . . if you have one!"

"You seem to forget that our ship, the *Annihilator,* will come back here and blow you all to hell!" snapped Bob. "You might kill us, old man, but you'll die yourself as a result. My men will return here to demand our release. If you and Hokar fail, they'll blast the whole tribe to pieces!"

"You can't frighten me or Hokar, young fellow!" snapped the man with an evil hiss. "Its been tried before! You can't bull your way out. In the first place you killed a dozen of Hokar's men! He demands your lives in payment for them. And by hell you're going to pay his bill and mine too!"

"What's your bill?" quizzed Bob with sarcasm.

"Civilization has wronged me, young man!" Hokar's ancient lieutenant snarled. "It accused me of a murder that I did not commit! It confined me in your prison at Nome! It took my wife away from me . . . ruined me in the eyes of all men! They tortured me until they made me confess to that crime; then sentenced me to hang! But I escaped! And all civilization is going to pay one of these days when Hokar's strength increases. He'll sweep the whole surface clean! But you're going to be the first on account! Your lives are going toward the settlement of civilization's debt to me! It will be a pleasure to see two officers of the United States Air Forces die a dozen deaths in one!"

"You're crazy!" grumbled Bright, amazed. "You're as crazy as a loon!"

"Who are you, anyhow?" gasped Bob, smiling grimly at the old fellow's evident insanity.

"You wouldn't know me!" the man hissed. "I escaped from Nome before you were born! But if it'll do you any good . . . I am Richard Brandt, formerly of Seattle and Nome!"

"Never heard of you!" said Bob. "What you did before you came here is nothing to me! We are not responsible for your hatred of society!"

"Every civilized man is responsible!" growled Brandt.

He nudged the grotesque beast beside him and addressed him in grunting tones. Hokar bent close to him and snarled like an angry beast. The two officers condemned to die in the jaws of the sacred Triceratops were amazed that Richard Brandt could converse easily with Hokar in the ruler's grunting speech. They conversed like snarling dogs for a moment and then Brandt faced the captives again.

"Hokar has set your doom for tomorrow when the mists clear from the face of the Central Sun!" Brandt interpreted with a pleased grin. "At that time a thousand warriors will return from the place where they attacked your ship. They will bring other prisoners to die with you. Warriors from all Hokar's outposts will be on hand to witness the sacrifice!"

Bob and Bright were stunned into immobility, unable to believe their ears. It was hard to realize that death loomed over them like a grim, menacing spectre; but there was no doubt that Hokar and Brandt meant to carry out their planes for their destruction on the morrow. But how did Brandt know that Hokar's warriors had made a successful raid on the *Annihilator's* scouting party? Undoubtedly they had attacked the ship and failed, but by Brandt's words, they must have taken the scouting party which had retreated into the jungle when the mastodon herd thundered down upon it at the swamp. The two officers did not know the real significance of the throbbing drums, the wireless system of the savage tribes of Hokar. Richard Brandt must have taught the terrible Triceratopsians many things since he arrived among them. Communication by thundering drums must have been one of those things!

CHAPTER VII

Imprisoned!

COMMANDER ROBERT ALLISON and his first officer Bright were taken without further ceremony out of the great council-house and led away. Outside a great mob had gathered to await the reappearance of the two officers who to them must have been as grotesque in appearance as any of the Triceratopsians were to the men from the *Annihilator*. Again mobs of Triceratopsian youngsters, armed with stones and sharp sticks, flew at them with a hatred. Bob kicked angrily at a savage, half-grown beast which had attempted to bite him, sending the beast spinning. Instantly a Triceratopsian cuffed him cruelly for his defensive act and they were led between mud houses and finally halted in front of a square stockade.

The mob followed, growling and snarling among themselves like a pack of hunger-crazed wolves. But they stood away at a safe distance now as two Triceratopsian warriors swung open a great gate leading into the stockade which comprised towering logs, sharpened to points at the top like an old-time frontier fort. The two officers felt that Brandt had had a hand in having the stockade erected for it was different from any other type of Triceratopsian structure. It showed human thought and genius at first glance.

They were led into the "pen" rapidly. A dozen savages of Hokar's horde, followed by Brandt himself, escorted them to the far side of the stockade and proceeded at once to peg them out spread-eagle fashion to the rough wall. Knowing the uselessness of resistance, they meekly permitted themselves to be tied, hands and feet, with twisted fibre thongs that bit into their wrists with stinging pain. The Triceratopsians were certainly taking no chances on their breaking their bonds and escaping, for the bonds were drawn tight and knotted, almost shutting off the blood from their hands.

Brandt himself inspected the thongs and grunted with satisfaction. He stepped off and surveyed the doomed victims with an air of supreme contempt.

"That's the beginning of your end!" he snapped, waving the Triceratopsians away with a flip of his grimy hand. "You'll hang there until Hokar is ready to feed you to his sacred beasts!"

"You'll suffer for this, you big stiff!" snapped Bob hatefully. "If I could get my fingers on you I'd wring your scaly neck, you dirty . . . !"

Brandt pulled his open hand back over his head and sent it with stinging force into the commander's writhing features. He groaned and sagged under the blow for it had great power despite the man's advanced age.

"That's what I think of you, young fellow!" Brandt hissed. "I could tear you to shreds with my bare hands if I felt like it! But I'll get more satisfaction in seeing you chewed up in hunks!"

"You're a yellow rat, Brandt!" Bright swore in his face.

Hokar's human lieutenant drew back his fist again and held it. He grinned and let it fall, nodding.

"Yellow or not won't save you, mister!" he growled. "Another word out of you and I'll turn those savage brats in the pen to muss you up!"

"Yeah?" hissed Bright.

"Yeah!" snapped Brandt, emphatically, turning on his heel and walking toward the gate, which banged shut after he made his exit.

Bright, staring around the stockade, now gasped out loud at what he saw.

Pegged out against the wall on the far side were the sagging forms of other men, hanging limply to their wrist-thongs! Bright let out a curse and hissed at Bob. The commander was hanging almost inert from the effects of Brandt's savage blow, but he looked up at the voice of his first officer.

"We're not alone here, Allison!" cried Bright, excitedly. "Look over there!"

Bob peered into the shadowy gloom across the stockade and gasped.

"Men!" he exclaimed. "Why, Bright, they must be the members of the Swedish polar expedition! Are they dead?"

"They look it, Commander!" snapped Bright. "No! By God, they're living all right! They must have thought it best to play dead when we came in! Hey,

over there!"

A man with a heavy black beard shook his head wildly and looked up. His eyes flashed like pools of fire in the gloom as they found the source of the voice that brought him out of a stupor. He stood suddenly rigid against the wall, tugged at his wrist bonds, and then stared across the stockade stupidly.

"What's wrong with you fellows . . . all dead?" Bright asked, pausing for a reply.

The bearded man shook his head dumbly and shrugged his powerful shoulders. Then he turned his head to the man next to him and hissed like a snake to call his attention. The fellow lifted his head and surveyed his neighbor with alarm. They conversed in an alien tongue for a moment and then the second man faced the distant wall of the stockade.

"My associate does not understand English," he said weakly. "We've been sleeping from exhaustion, I guess. What are you doing here?"

"The great Brandt has pegged us out for sacrifice!" Bob volunteered. "Do you men belong to the Swedish polar expedition?"

"Brandt?" the man hissed. "The filthy murderer! Yes, we are all that remain of the expedition! What brought you into the interior?"

"The United States Government sent us out to look for you!" Bob replied without hesitation. "And we were investigating a strange open lake on the surface when we came upon this world. I was in command of the *Annihilator II*, our ship. With Bright here, I set out with a scouting party to explore around. We got lost and were captured by Hokar's brutes!"

"I'm sorry we were the cause of your predicament!" the Swedish scientist said sadly. "We were twenty strong when we landed to investigate this interior world. Hokar's savages attacked our ship and destroyed it, killing ten men outright! Where is your ship now?"

"Gone!" said Bright. "The brutes attacked it and the officers in charge took her off! We've no idea where the *Annihilator* is now, but we have a feeling that she'll come back for us!"

"Come back?" the man asked hopefully.

"She'll come back all right!" snapped Bob. "And when she does, Brandt and Hokar will see hell popping!"

Hopeless

BY this time, ten weary men, standing rigid against the wall opposite the two officers, were all staring with wide-eyed wonder. Professor Donalsen seemed to be the only member of the bedraggled expedition who could speak English, and he acted as spokesman for his fellows. He talked the whole matter over with the *Annihilator's* commanders and explained to his comrades all that was said. Bob and Bright saw their eyes flashing with joy as they learned that the *Annihilator* had attempted to find them. But they were suddenly downcast when they were informed of the ship's take-off, leaving its chief officers stranded. Bright interrupted the scientist and regarded him curiously.

"When has Brandt timed you for death?" he asked bluntly.

"He hasn't set any time yet," the scientist replied gloomily, "but we expect it with each passing hour! He's just playing with us now . . . killing us with anxiety and apprehension. And you . . .?"

"When the mists clear from the face of the Central Sun!" Bright growled. "When will that be?"

"That will be tomorrow by our reckoning," said the professor tensely. "Each night there is a mist before the sun, probably steam, and when it clears, Hokar's horde worships the Triceratops, a great beast to which they bear a striking resemblance. We've seen the beast! It is a tremendous creature of the reptilian class, with a head like the savages, and a squat body with a long, bone-studded tail. The Triceratops is to these creatures what the great ape is to our kind. Here man-like beings sprang from the animal triceratopsids, as the humans sprang from the simians of our world, resulting in the creation of a Triceratopsian culture over which Hokar rules."

"Well, cheer up, we die in the jaws of the Triceratops when the mists clear tomorrow!" said Bright. "Unless the *Annihilator* shows up before that time, I guess our bones go to the Triceratopsian brats!"

Professor Donalsen shuddered and sucked in his breath.

"The Triceratops will leave no bones to be picked, friend," he said.

"Have you tried to get loose?" Bob asked suddenly.

The scientist laughed harshly.

"Certainly, but it is futile! Brandt had Dr. Jorgenssen flogged for even trying. They watch us almost constantly, waiting like carrion for one of us to die!"

For the next few minutes the explorers talked among themselves. Bob hung his head resignedly with thoughts of Joan uppermost in his mind. Strangely he did not worry much about his own life. He dreaded more the shock she would suffer when he failed to return or if word was handed to her telling of his death. But that seemed unavoidable now. He must pay with his life for the apparent injustice of man-made laws and civilization against one man—whose broodings had created within him an insane hatred for all mankind.

CHAPTER VIII

Other Victims

THE sun in this strange interior world did not set like the sun of the Solar System. Instead it seemed to stand almost overhead now like a fixed star of the proportions of the moon as seen from the surface. A foggy mist was beginning to form an obscuring photosphere around it, not hiding it entirely, but causing the sphere to glow like a cold, clammy ball.

Days and nights here were determined by the clouds of mists that formed over the central sun with as unceasing regularity as our own solar sun slips down in the west to herald the approach of night, and rises again in the east with the dawn of a new day. And the disk looked as cold and chilly as an arctic moon, but Bob Allison felt no change in temperature when the central sun became almost hidden from his view by the mists.

Strangely, the climate did not vary, remaining as

fixed as the interior sun itself. He watched the clouds for a time and then the ghostly shadows that danced around him on all sides with the fall of a deadly gloom over the domain of Hokar. Shadows were everywhere, lurking like evil spectres in the corners of the stockade. An interior night was at last on hand and the jungles seemed to awaken to it by creating a ceaseless din.

Those in the stockade shuddered when they heard the terrifying scream of a sabre-toothed tiger. Great mastodons were evidently crashing through the matted brush on all sides of Hokar's city of mud mounds. Huge insects droned overhead in swarms. Batlike birds with membraned wings flapped dismally over the open stockade like great carrion. Some of them hesitated in their slow, deliberate flight, and circled the stockade. One flew very close, and Bob saw its eyes flashing like fire-flecked rubies as it surveyed the scene below.

Then suddenly Hokar's city went into pandemonium! Those within the stockade were terrified by the gutturals that came from innumerable Triceratopsian throats. The sounds harmonized with the beastly grunts, screams and groans that emanated in the jungles beyond the town, but they were now so close that the doomed humans were horrified. What was happening, anyhow? Was the *Annihilator* returning? Had it been spotted by the Triceratopsians, creating uncontrolled excitement among them? Bob was soon to learn the reason for the excitement.

After a time, the stockade gates were swung open again and in marched a dozen humans guarded by a squad of Hokar's warriors. They were immediately pegged out against the wall adjacent to the two officers, and deserted. The gates crashed shut and presently the town became still again. Hokar's thousand warriors had returned from their raid on the *Annihilator* and they had brought with them what remained of the scouting party!

Instinctively Bob counted them as they were pegged out, keeping silent through the entire process. Then he heard the men swearing and cursing the hand of Fate that had led them into the claws of these brutes. Bob remained silent until after the gates closed; then, staring into the gloom, he addressed his men. Bright had been dozing and was too stupefied to make a sound.

"What happened, men?" tensely Bob asked. "Can you see me?"

He was aware that all heads had been turned in his direction and all eyes were staring at him. Then he heard the nearest man gasp excitedly.

"Commander Allison!" the man ejaculated in amazement.

"Yes, I am Allison," said Bob softly, peering at the shadowy forms.

"We thought you were killed when the herd of elephants stampeded, sir!" the man gasped. "Then under command of Lieutenant Backus we retreated back toward the *Annihilator*. But when we reached the meadow we found the ship was being attacked by the savages. They had somehow brought a great herd of huge mastodons into the fight and hurled them at the *Annihilator*. The animals would have wrecked her in no time with their heavy charging, and the ship took off for protection. We were captured after a fight. Lieutenant Backus and Professor Marble were speared. We left twenty-three dead on the ground!"

"Backus and Marble killed?" Lieutenant-Commander Bright interjected suddenly.

"Killed at the first skirmish. Dr. Ralston and Sergeant Ringer were so badly wounded that they were left on the ground to die! Ringer had an arrow through his chest and Ralston was run through by a spear!"

"Yeah!" volunteered a man next in line. "And the devils drank the blood of the dead and left the dying to the carrion!"

"My God!" groaned Bob, blanching. "That's terrible!"

"Terrible is right, sir!" the man admitted. "But what's going to happen to us?"

"I . . . I . . . I don't know, men," Bob said dismally. "Lieutenant-Commander Bright and myself are condemned to die in a few hours! What's left of the Swedes are here, too, awaiting death. You'll probably follow!"

The men groaned. Every ear had heard and then from across the stockade came the brave voice of Professor Donalsen.

"If we could get loose, Commander Allison," he said in low tones, "there's enough of us to put up a good fight and go down like men!"

Bob tugged savagely at his bonds and felt them give just a trifle, but the fibre thongs bit into his flesh and held. He grunted with pain and gave it up.

"Good idea, professor!" he gritted. "But get loose first! It can't be done!"

The Coming of Dawn

LONG before the mists vanished from around the central sun, Hokar's city was awake. The din of the jungles had subsided slowly after a time and, as an interior morning dawned, became altogether silent. The Triceratopsians seemed to have worked themselves into a beastly silent frenzy during the gloomy night and had reached the climax as the shadows gradually lifted from the town.

They made terrifying sounds now outside the stockade and the pounding of countless feet on the hard-packed earth around the council-house told those within the pen that they were stamping a savage ritual. It seemed that their number had increased three-fold during the night, and now the mounded city was in an uproar.

The humans, pegged out for slaughter or sacrifice, had spent a terrible night. Every time Bob's eyes closed in sleep, he was rudely awakened by the bite of the thongs into his wrists as he sagged inert. After a while he gave up all thought of rest and contented himself with standing erect. Bright swore for hours to relieve his mind and stood awake beside his superior officer.

Gradually the mists cleared from the central sun and it began to glow like a ball of red fire, causing steam to rise from the jungles in clouds, dissolving slowly in the atmosphere which reeked with decaying carrion and other terrible smells of the town. All night Bob had watched the space overhead for a glimpse of the *Annihilator II*, hoping the hope of a doomed man

that she would heave into view and rescue them. But the *Annihilator* seemed to have deserted the interior world entirely for she did not appear.

Then presently the stockade gates swung open and a dozen Triceratopsian warriors swung rapidly in. They went at once to the two officers, whom they cuffed cruelly with raking claws, before releasing them from the stockade. The warriors then closed around them in an impenetrable circle and marched them out of the pen.

As they went, Bob glanced toward his men. They were fighting at their bonds, trying to get loose. Groaning and swearing, they hurled vile epithets at the grotesque fighters of Hokar's tribe. The Triceratopsians paid no attention to them. As they passed the Swedish scientists, the unfortunate men began to yell loudly in protest. The cries were taken up by the American flyers, and the stockade was in a sudden bedlam.

But the Triceratopsians looked neither to right nor to left. They went about their business like mechanical men, carrying out the will of some superior mastermind.

A great throng of savages was on hand to greet the victims with hostile sneers, snarling grunts and savage gutturals. To Bob and Bright it seemed that the whole jungle had suddenly become on friendly terms with one another and had congregated to watch the annihilation of the condemned strangers. A wide aisle was made in the crowd and the two officers were led through it past the great council-house to what appeared to be a tremendous amphitheater on the edge of the town.

In the center of a depression stood a huge, barred cage, and in it was a huge, terrifying beast with a head like the savages of Hokar's band and the body of some great, scaly lizard!

Bob shuddered when he beheld the thing. Saliva, as red as blood, dribbled from its mouth, and when it caught the scent of the two humans, it lowered its great head and grunted thunderously, pawing the earth like a maddened bull. The sacred Triceratops was ready to pounce upon the two officers and devour them like flies in the jaws of a dog!

As they strode swiftly toward the cage, Bright suddenly faltered. Two giant Triceratopsians grasped him by the arms and hustled him forward. A vicious kick sent him sprawling on his face. Bob rushed forward and picked him up. Bright was blubbering like a frightened infant. His nerve had clean snapped and hurled him on the verge of insanity. But Bob kept cool. For no nameable reason, he had a hunch that the Triceratops was going to be cheated. During the past few moments his hopes had been strangely lifted from the depths. He faced the situation with a grin, looking upon it as an adventure from which he would be snatched when the jaws of death yawned open for him.

"Buck up, Bright!" he said. "Cripes! A man only dies once, and it'll all be over in a minute. Stick out your chest, old man, and think about the *Annihilator* coming!"

"I've given up all hope, Allison!" Bright moaned. "I'll go completely crazy in another minute. I'm not ready to die . . . I've got a family . . . kids and all, back in Kitty Hawk! What'll become of them when I'm gone!"

"Don't worry about that, Bright!" Bob soothed. "Uncle Sam always takes care of the families of its men! They'll be provided for!"

Bright broke down now and wept. Bob placed an arm around his shoulder and held him up. The first officer was on the verge of complete collapse. He could have died with a grin in a fight, but facing such a terrifying beast as the Triceratops, whose jaws bellowed for his flesh, was something else again and his nerve quit him.

Within twenty feet of the cage the procession halted. From the side came Hokar, followed by Brandt and a double line of Triceratopsian priests. Hokar was adorned in a flowing robe of feathers making him look like some strutting bird with the head of a beast. Brandt was likewise adorned and he grinned evilly as he quick-stepped to the side of the chief. In their rear, the grotesque priests, each carrying a skull-crowned sceptre and painted hideously in red streaks, maintained a grunting chant that rose and fell with a two-toned menace.

Then the drums began to throb in the village. They increased in volume until the plain thundered. The rumble smote upon the officer's ears like the steady crash of high-explosives. Bob held his hands over his ears for a moment's relief. Bright ignored the sounds as though lost in his own terrified emotions. As a result of Bob's urging, he banished his tears and finally faced death like an officer and a man, stiff and rigid, calm and aloof.

Hokar paused in front of them. Brandt leered and the priests circled in crescent formation behind them. Bob heard a sudden high-sounding hiss and looked up mechanically. It sounded like the drone of the *Annihilator's* exhausts. But the space over his head was fathomless and empty. Brandt laughed loudly at the move and then scowled.

"You needn't hope for your ship to return, dog!" he said. "She's gone—scared away! I'm told she quit this world entirely and returned to your filthy civilization!"

Bob glowered at him for an instant and then deliberately spat in his face. Brandt sprang forward at once, jerking at the ancient pistol that dangled at his belt. But free from bonds as he now was, Bob quickly stepped forward and hurled his right fist with all his strength at the renegade's writhing features. It collided with Brandt's temple and sent him sprawling. Allison would have been shot on the spot for his act had not Hokar placed a clawed hand on Brandt's shoulder and shoved him off balance. An iron slug from his hand-made cartridges whined past Bob's ear and thudded into the broad, scaly chest of a warrior behind him. The Triceratopsian grunted and wilted. He got up, stared about him stupidly and vanished in the crowd that had followed.

Hokar emitted a few guttural snarlings at his lieutenant and then knelt down before the two officers. He scraped his bony head on the ground, snarling like a wolf. The priests continued their chanting and Hokar stood erect. Brandt rose and scowled menacingly, but made no further attempts to cheat the Triceratops.

Wreaths of damp club-mosses were placed on the officers' heads by two priests. This ceremony was followed by a guttural incantation, and the savage ritual was ended. Hokar bowed again and slowly strode away. Brandt bent over in mock reverence and hurried after the chief. They took up a position on the edge of the amphitheater depression and stood majestically surrounded by the priests. Bob and Bright were led closer to the cage by four warriors. Around the saucer surged the population of the town and the visitors who had come in during the night.

Two Triceratopsians went to the cage and pulled out the lock-peg. The door swung open of its own weight as the warriors raced away to the safety of higher ground. Bob and Bright were left standing alone before the open cage. The Triceratops pawed the earth and came crawling into the open, head lowered, eyes glaring, and blood dripping from its mouth. Then the beast charged like an express train, straight toward the horrified officers!

CHAPTER IX

The *Annihilator* Comes!

TOO horror-stricken to move, Bob and Bright stood rooted to the ground and stared at the oncoming beast. The ground under their feet seemed to throb under the weight of the Triceratops. Then, suddenly realizing that death was almost upon them, Bob gave Bright a powerful shove out of the brute's path, and then leapt aside himself. As he did so, he heard disappointed grunts from the Triceratopsians standing on the higher ground, who were watching with the lust for blood. But Allison paid little attention to them now. He was fighting to keep away from the giant creature . . . the idol of this prehistoric world.

Scarcely had he stepped aside than the Triceratops thundered past. As it went it lashed out with its thorny tail and droned over Bob's head with a scant few inches to spare. Bright picked himself up from the ground, stared around him, and began to run. The Triceratops spun around like lightning, bellowed once and pursued him. Waving his arms wildly to distract the attention of the maddened beast from the running first officer, Bob saw Bright dash around the cage and reappear on the opposite side. The Triceratops was almost upon him. Then—an unexpected thing happened.

With scarcely ten feet to go before closing its great jaws around Bright, the Triceratops was seen to falter suddenly to its fore-knees. Instantly there was a muffled explosion and the brute's head appeared to explode in bloody fragments! Its tail lashing madly, its body jerking in violent convulsions, the Triceratops lay headless upon the ground.

Dazed, Bob stared at it for an instant and then raced toward Bright. They came together and crouched.

"Someone's shot the brute, Bright!" Bob cried.

"Look! God! We're saved!" shouted Bright, looking up. High overhead was a long, silvery body, glistening like a needle, in the glare of the sun. "The *Annihilator!*"

Bob glanced upward.

The *Annihilator* was circling high above and coming closer with each passing instant! The ship was dropping down over the domain of Hokar, a single stream of flame roaring like a waterfall from her tail exhausts!

Shut in on all sides by a ring of Triceratopsians, Bob and Bright glared around them for some avenue of escape. They expected the savages to swoop down upon them at any instant to claw them to shreds. But the beasts seemed too stupefied at the sudden death of their monstrous idol to act. They stared upon the scene dumbly, and then Bob heard Brandt's high-pitched voice urging them into the depression.

As he looked around him, Bob suddenly realized that the explosive projectile that had killed the Triceratops had not come from the high-flying *Annihilator*. The ship had been too high for such accuracy, and the missile had come from a pistol! Someone armed with a regulation government pistol was in the neighborhood to protect them from the jaws of the beast! Who could it be? Certainly none of the men in the stockade were armed; and they couldn't have shot the beast if they had been, because Bob had left them trussed against the walls and there was no escaping the bonds. Besides, all pistols and rifles had been taken by the Triceratopsians!

Hardly had the mystery of the beast's death entered his mind than six rapid-fire explosions sounded in back of him. They both swung around instantly in the direction of Hokar and his priests.

Hokar, his body torn to shreds, lay upon the ground in an inert, bloody heap! Around him lay the still bodies of five of his priests. Brandt stood like a stone image beside his fallen leader, mouth agape, astonished. The sudden turn of events appeared to have stunned him. Then pandemonium seized the crowd. The whole horde broke into savage cries of fright and raced back toward the town.

Overhead, the *Annihilator* floated majestically. From her aerial torpedo tubes arranged just under her airfoils shot a sudden stream of black cylinders. Bob watched them race earthward. He was hurled flat on his face when the first of the torpedoes were exploded in the midst of the running horde.

"They'll blow hell out of the stockade, Bright!" Bob groaned, lying on his stomach a dozen feet from the beheaded Triceratops.

"Can't be helped if they do, Commander," said Bright, breathing heavily. "But I don't think they'll hit it, because the observers have probably spotted those within!"

Some strange instinct warned Bob Allison of approaching disaster in his rear. The peculiar sense that tells men that they are being watched or stalked, told him that danger still lurked near him despite the fact that the whole Triceratopsian horde was in terrorized flight. He rolled over on his back suddenly and leaped erect.

The Man in Disguise

BRANDT, his eyes flashing with an evil, deadly light, was advancing cautiously toward him, pistol in hand and ready to fire!

With a sinking sensation in the pit of his stomach, Bob crouched instinctively. Bright sucked in his breath

and sat up, his face suddenly pale. Brandt laughed like an insane creature and flipped his pistol in line with Bob's head.

"I'm going to drop you, young fellow," he snapped, "then plug your mate! I'm not going to be cheated! You'll pay—you'll both pay! I've prepared for just such a thing as an air raid! Your ship can't touch me! Are you ready to take it between the eyes now?"

"Don't be a fool, Brandt!" said Bob excitedly. "Lay off and you'll be pardoned by the government! We can straighten out your case!"

"No, you can't!" Brandt growled, bestially. "I wouldn't take a pardon if you could do it! I quit your civilization years ago and I'm still quits! Hear me? Down on your knees, young feller!"

"Can't you listen to reason, Brandt?" Bob appealed futilly. The man was undoubtedly crazy and would kill him in cold blood despite his pleading.

Brandt cackled like an idiot and then scowled.

"Down on your knees, young feller!" he hissed again. "Down so I can watch you grovel at my feet!"

"You can go to hell then, Brandt!" Bob snapped, bunching his muscles to spring at the insane convict. "I grovel at no man's feet!"

He heard the ancient pistol's mechanism click as the hammer was drawn back. A shudder surged through his body as he lurched forward like a cornered beast. Brandt's pistol roared in his face. He felt a sharp pain shooting through his shoulder and a black nausea clutching at his brain. But he fought to keep his faculties and groped blindly for the whiskered throat in front of him.

Blinded by a screen of red, savage under the influence of an uncontrollable anger, Bob Allison heard the pistol roar again and then his fingers encountered a grizzled throat. With all the strength at his command, he closed them tightly into the yielding throat of his insane enemy.

Brandt brought his gun down upon Bob's shoulder with terrific force. Bob felt the strength fleeing from his fingers. The pistol fell again and his hands came away from that savage throat. He heard Brandt chuckling as he fell and cringed to stay the shock of an expected bullet. He closed his eyes and groaned; then suddenly came a muffled explosion. He felt something wet and heavy strike him in the face. Bright yelled and he opened his eyes.

What he beheld caused him a horrible nausea. Brandt's ancient body lay in mangled bloody tatters in front of him! An explosive missile had blown him to pieces. Sick, his senses swimming, Bob rose and wiped his face. His hands came away blood-stained. Striding swiftly toward them from the opposite side of the depression was the figure of a Triceratopsian. He held a pistol in a human hand and it was smoking!

Awed and wholly uncomprehending, Bob and Bright watched the approaching figure, amazed at the white hands that protruded strangely from underneath a scaled cloak. Then as the thing approached they saw him shove the pistol into a cartridge belt and literally tug at his head.

They saw the head of a Triceratopsian torn from scaled shoulders and before them stood the grinning form of Sergeant Ringer!

"Ringer!" Bob and Bright gasped together.

"At your service, sirs!" said Sergeant Ringer, saluting.

"What in hell's the idea, Sergeant?" Bob exploded with a ring of joy in his voice. "We were told you had been left wounded back on the meadow!"

"I was wounded, sir," Ringer said, slipping out of the skin of a Triceratopsian warrior and casting it aside with a look of loathing. "But not so bad as the devils thought! An arrow punctured me on the chest, causing a lot of blood to spill but doing little damage. But Ralston died shortly after the savages left us!"

"Sergeant," said Bob extending his blood-stained hand, "you'll be cited and promoted for this, sir! How did you do it?"

Sergeant Ringer blushed under smears of Triceratopsian blood and stood at attention.

"Just an old trick, sir," he said. "I played the role of wolf in sheep's clothing! When the devils left the meadow, I skinned one of their dead and draped it around me to make me look like one of them. Then I trailed 'em through the jungle to the town. I hid all night in a hole not far from here and waited my chance to get among them without creating suspicion. After they took you from the stockade I slipped in and turned the other men loose. They told me you were to be sacrificed and I just happened to get here in time to shoot the animal as it bore down upon Mr. Bright. To scare the lot I blasted the big fellow over there, and then watched this white man stalk you. I held my fire, thinking you'd want to settle with him yourself, until he got the top hand, and then I let him have it, sir!"

"You're a very brave man, Sergeant!" said Bright. "A very brave man, indeed! Sergeant, I salute you, sir!"

Lieutenant-Commander Bright stood suddenly at attention and lifted his right hand in a stiff salute. Sergeant Ringer blushed and returned it.

"Where are the men from the stockade?" Bob inquired, grinning, his hands trembling.

"They're concentrated on the edge of the town, sir, just within the jungle," said Ringer. "Some of them are armed, for I brought three pistols with me. They're safe, providing the *Annihilator* doesn't plant a torpedo among them!"

Overhead the *Annihilator* hovered like a tremendous bird and spread death into the Triceratopsian town. The world inside of the Earth trembled with each deafening explosion of aerial torpedoes. Then after a time the huge craft dropped lower and the three men, safe in the depression, heard the rattle of machine gunfire. The ship's guns hissed and rattled, sending explosive messengers of death into the Triceratopsians who, without a leader, went mad with fright.

A savage raced down into the amphitheater suddenly to escape the deadly fire from the *Annihilator*. Sergeant Ringer lifted his pistol and sent him to death without hesitation. Eventually the three climbed to higher ground to survey the damage.

Hokar's horde was broken; his town lay in devastation. Great holes yawned like craters in it where the powerful torpedoes had exploded. Bloody masses lay

on every side. The *Annihilator* had done her work well. Hokar would never increase his strength for a raid on the civilized world! His savage warriors were almost exterminated, even as he himself had been killed instantaneously by Sergeant Ringer's deadly pistol.

The *Annihilator* had played her part for mankind in preventing some future catastrophe. She had played her role, unconscious of the fact that she was wiping out mankind's most terrible enemies. But she had not performed without losses. Thirty-five of her men lay dead on the meadow.

After the *Annihilator* had landed in the center of the devastation she had wrought, she took on the lost Swedish explorers, the two officers and the remainder of the ill-fated scouting party. Then she went at once to the meadow, where a party was landed to bury the remains that were left after the savage beasts of the jungle had gorged. The *Annihilator II* planted an American flag above them and proclaimed the world on the interior a possession of the United States of America. And who could deny her right to it, after she had conquered it? Certainly the Swedish explorers made no objection.

After a brief ceremony over which Bob Allison officiated, the *Annihilator II* set her course for the surface and eventually emerged under the brilliant rays of the arctic sun. She streaked across above the fields of ice, in a straight course for Markham Island, where the two radio-television men were picked up. She ultimately reached Kitty Hawk, where every man was hailed as a hero.

But in Joan's eyes Commander Bob Allison was the greatest of them all, and a great celebration took place throughout the nation when the two were joined in marriage by the chaplain at Kitty Hawk.

THE END.

"The Magazine of Prophetic Fiction!"

In the February 1930 issue of SCIENCE WONDER STORIES we announced an unusual contest—$100.00 in gold was to be given for the best slogan that would describe SCIENCE WONDER STORIES and its contents.

The contest closed at noon on May 1, 1930, and at that time by official count we had received 4,362 entries, together with accompanying letters giving the reason for the choice of the slogan. The enthusiasm over the contest must have been simply tremendous.

Naturally the classifying of all these entries, the arranging of them into grades so that the winners might be picked was a monumental job, particularly because so many of them were so good.

Then came a series of editorial conferences in which the editors and the publisher gradually weeded out the better ones, in order to finally pick the winner.

The job was not easy; but in the end an almost unanimous agreement was obtained on the selection of the slogan, "*The Magazine of Prophetic Fiction*," as entered by Mr. Paul D. Mast, East Jackson Street, Millersburg, Ohio.

SCIENCE WONDER STORIES

$100.00 SLOGAN CONTEST

Won By

PAUL D. MAST

East Jackson Street, Millersburg, Ohio

for his slogan

"The Magazine of Prophetic Fiction"

This slogan then has been officially adopted for WONDER STORIES and the editors are greatly enthused over it. They feel that it explains fully and simply the mission of WONDER STORIES—to present fiction that prophesies the future of our earth and our world, fiction of mental stimulation, education, and entertainment (the blending of mystery, adventure and romance).

The letter of Mr. Mast follows:

Editor, Slogan Contest,
SCIENCE WONDER STORIES,
New York City.

Kindly find enclosed slogan for SCIENCE WONDER STORIES. This slogan at first glance may look rather commonplace but I think its connotation is its chief merit.

There is an old adage that "Truth is stranger than fiction." However true this may be, fiction often is very near the truth. The truth generally takes place some period of time after the fiction is written. We can test the veracity of this statement by application to several of Jules Verne's stories. His "Around the World in Eighty Days" has more than been confirmed, as has also his tale of a balloon crossing the Atlantic been dwarfed by the actual facts of the late voyage of the *Graf Zeppelin*.

This relation of fiction to truth is the essence of my slogan. Who knows but what many of the stories in SCIENCE WONDER STORIES will emerge as actual facts and situations, in the future. Looking at the stories in this light, they are invaluable as guides to what we may expect in later ages.

With this thought in mind I think that my slogan typifies the good in, and practical value of SCIENCE WONDER STORIES.

Sincerely yours,
PAUL D. MAST,
East Jackson St.,
Millersburg, Ohio.

Among the honorable mentions are: "Fiction as Strange as Truth," submitted by W. H. Welch, 2073 Pingree Avenue, Detroit, Mich.; "Science, Romance and Prophecy," offered by James McDonald, 3058 E. 79th Place, Chicago, Ill.; "Facts! Through Fiction!" by Robert Englehart, 220 East 8th Street, Harvey, N. D., and "Interesting Fiction, Easily Read," by Robert E. Cron, Jr., Winchester Street, Gallatin, Tenn.

THE RESULTS OF THE "AIR WONDER STORIES" SLOGAN CONTEST WILL BE ANNOUNCED IN THE SEPTEMBER ISSUE

$300.00 PRIZE CONTEST

FEBRUARY 1930 AIR WONDER STORIES
COVER CONTEST

SECOND PRIZE $75.00

Awarded to

WHEN THE MOONS MET!

By CLYDE F. BECK

815 Louisiana St., Vallejo, Cal.

(*Illustration by Miller*)

Half buried under the wreckage he could see the enormous [illegible] Tandal falling on the other globe

KARDEL Palur came into the control-tower of *Space Ship Number One* as the Spatial Exploratory Epedition was about to sail. He made his way to the side of the commander, who was seated before his control-board, and bowing, handed him a sheaf of papers.

"The other vessels report everything ready, sir," he said. "Here are the photo-records of their reports."

Malben Robar, Expeditionary Commander, glanced at the papers. "Fine, Kardel Palur," he replied. "Wait, stay here; I may want to send a message. And in the meanwhile, Kardel, do we need to be so formal?"

"I suppose not, Malben, but after all, this is a disciplinary organization."

"But you rank next to me, and besides, we have been friends too long to speak to each other by titles. Can you stay here with me until after we start? You're not needed in the communication room, are you?"

"No, I'm not on duty now. I only came in here to watch. The photo-records could have been made right here at your own vision-plate, you know. I'm curious about the workings of this ship."

Malben laughed. "All right. I wanted company, and I would as soon talk to you as anyone on Iona."

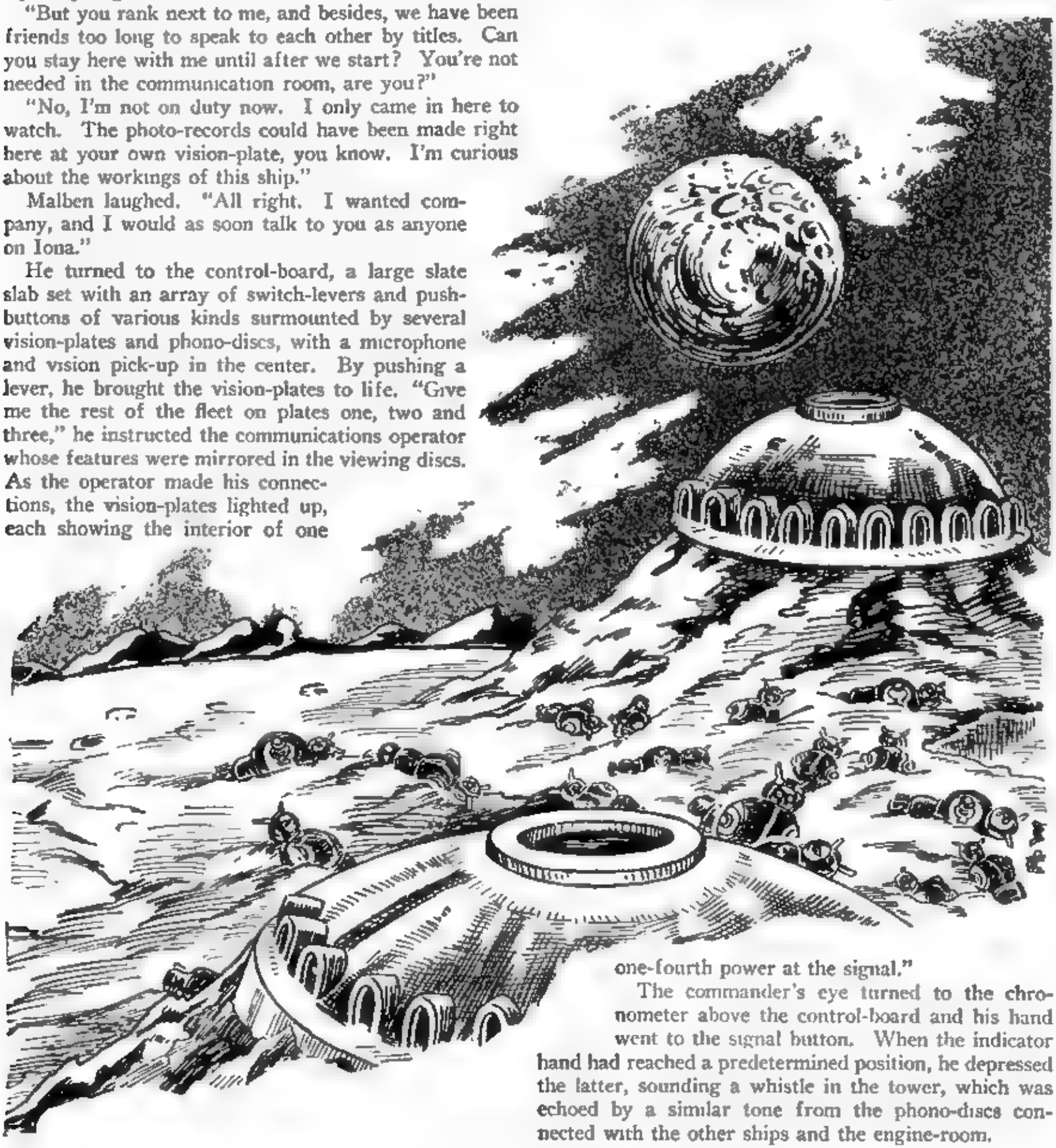
He turned to the control-board, a large slate slab set with an array of switch-levers and push-buttons of various kinds surmounted by several vision-plates and phono-discs, with a microphone and vision pick-up in the center. By pushing a lever, he brought the vision-plates to life. "Give me the rest of the fleet on plates one, two and three," he instructed the communications operator whose features were mirrored in the viewing discs. As the operator made his connections, the vision-plates lighted up, each showing the interior of one of the other three craft which comprised the Expedition.

When all the connections were completed, the commander spoke into the microphone again. "At the signal," he instructed, "the whole fleet will rise under one-fourth power until we are clear of the atmosphere. Then I will signal again and the fleet will separate, each half taking up its plotted course. Stand by; the set time is very close."

Next Malben asked for a connection with the engine-room. "Are the generators all in shape, Bondak?" he asked of the engineer whose face appeared in the vision-plate.

"All fine, sir," was the reply.

"Set them idling now; the two big ones. Give them one-fourth power at the signal."



The commander's eye turned to the chronometer above the control-board and his hand went to the signal button. When the indicator hand had reached a predetermined position, he depressed the latter, sounding a whistle in the tower, which was echoed by a similar tone from the phono-discs connected with the other ships and the engine-room.

Almost immediately the generators went to work and the craft began to rise, accelerating rapidly. Kardel felt a great weight forcing him to the floor. He staggered to a port and looked out. The ground was falling away swiftly, and the gathered crowds below were surging out and over the deserted landing-stage like a swarm of tiny insects. When he turned his head to look out on a level with the port he could see the three other ships following the flagship up through the attenuated atmosphere of Iona, their golden sides gleaming in the sunlight.

Malben turned in his seat at the control-board. "You had better sit down," he said. "We will be out of the atmosphere soon and accelerate faster without the friction of the air. There is no need to wear yourself out."

Kardel took a seat near the port, his mind awhirl with the strangeness of his present position. Here he was, in a frail vessel, made of weak metals and brittle glass, supported only by a mysterious form of energy of which he knew next to nothing, trying with his few companions to journey across the trackless wastes of cold and empty space. Doubts of their ability to do so and consciousness of the horrible void beneath his feet had a more depressing effect upon him than the enormous apparent increase in his weight caused by the upward acceleration of the craft.

With an effort, Kardel shook off this morbid state of mind and turned again to the port. The city of Kestra, which they had so recently left, was now a mere anthill, far below and somewhat to the east, where the rapid rotation of the tiny world of Iona had already carried it.

THE second prize winner of the February 1930 AIR WONDER STORIES *cover contest is distinguished by the fact that the action takes place on a strange world, perhaps in a strange solar system. Our author prefers to leave us at sea regarding the locality of the three "moons," which in itself adds an element of interest and mystery.*

This story, although it starts off calmly, has a sweeping and thrilling climax. The world is filled with scientists such as Malben who consider that the security of their race is to be put above their own personal security and when the time comes they are willing to lay down their lives for their race.

The story illustrates very well, also, that an expedition to another planet, even for the most peaceful purpose, must be prepared to encounter strange forms of life, and protect themselves from weapons that might be undreamed of.

Mr. Beck has aroused our curiosity as to what the Karkorians were like and we hope that in another story he will tell us more about them.

To An Alien World

SO strange was the view and so absorbing the contemplation of the shrinking landscape that Kardel became quite lost to his surroundings and was rudely startled when a second whistle sounded and he was forced back into his seat again by an increase in the acceleration of the space-car.

"Come over here and sit in this padded seat; it will be more comfortable," Malben suggested.

The communication officer did so, and was shocked again when he leaned back against the padded rest and looked up through the skylight to see the morning sky turned jet-black and spangled with countless stars which blazed like jewels on a velvet cloth. It was a peculiar experience to have the morning sun streaming in through a side-port and to gaze up into a midnight sky against which the stars burned with a cold and eery splendor. Kardel realized that the blackness of the sky was caused by the absence of the air which on Iona served to diffuse the light and tint the sky with its normal blue, and that the stars blazed so fiercely because none of their light was absorbed by atmospheric layers, yet this knowledge did not make the sight any less wonderful or weirdly beautiful.

Malben again spoke to the engine room. "Full power on rotary number two," he instructed, sighting through a telescope-like contrivance above his head. "Stop!" he said presently, then "Number three . . . stop."

"Look out of the side port now," he said, turning to his friend, and laughed at the other's gasp of astonishment. The dwindling world which they had just left was now level with the side of the space-car and slowly shrinking more and more as it drew away from and below the swiftly accelerating vessel.

Kardel was manifestly puzzled. "How did we turn?" he asked. "And if the world is out there to one side, why does our weight force us straight down toward the floor? And last, how do we manage to move at all without reaction-tubes or air-screws or any other means of propulsion?"

Again the commander smiled. "The turn itself was made by a reactionary force. A great rotary motor at the axis of the ship caused it. As the rotor of the motor turned one way, the stator was subjected to a force tending to turn it the other way. Since the stator is fastened to the hull of the space-ship, the craft naturally turned too, although, of course, much more slowly. Three motors on the three axes of the vessel allow it to be turned in any desired direction.

"As for weight, what you feel is not really weight caused by gravity, but is due to inertia. The space-ship is accelerating upward; that is, upward in relation to itself, and as your body tends to lag behind because of its inertia, apparent weight operates downward, or opposite to the direction of acceleration.

"The third part of your question is harder to answer understandably, but since I invented the method, I believe I can explain it. I might say that this vessel moves by means of direct traction upon space, but that would give a somewhat false impression of its real operation. It would be more correct to say that it is made to move by means of an artificial gravitational field. Gravity, as you probably know, is caused by a warping or torsion of space which exists in the neighborhood of matter. Now if we can produce an identical warping in space without the presence of matter, or rather independently of its presence, the area affected

will become a gravitational field exactly as it would if matter caused the warping, will it not?"

"That seems logical, but how can you produce the warping in space without matter?"

"Very easily. Radiant energy, such as light, possesses both inertia and momentum, which were formerly thought to be properties of matter exclusively. This is not the only matter in which energy invades the field formerly believed to be exclusively that of matter. Such phenomena have led Ionan scientists to believe that the boundary between matter and energy is not nearly so sharply defined as it once seemed. Indeed, some of us believe that the distinction is merely imaginary and that matter and energy are fundamentally one and the same. If this belief is accepted, it can be seen that it is by no means impossible for energy to perform a function that is usually considered to be a function of matter."

"I never looked at it that way before" the other said, somewhat dubiously, "but it sounds reasonable enough. All those green bowls on the outside of the ship are generators for this artificial gravity, then?"

The commander laughed. "The 'green bowls,' as you call them, are the reflectors that focus the space-warping energy in one direction so that the artificial field does not operate equally in all directions and so neutralize itself. They are made of a glass-like composition which is the only shield I know of for this energy. The two big reflectors on top lift and support the craft; the small ones in the front and rear are designed to move it from place to place above the surface of any planet we may chance to visit. The rest of the hull is sheathed with a thick coating of Element 79* which reflects most of the sun's radiant energy and so prevents overheating."

CLYDE F. BECK

Mr. Beck is 18 years old and graduated from high school last year. He is at present studying to be an astronomer. This is his first story.

"Just one more question," the other said. "I must seem ignorant, but I have been working too hard on that uni-directional transmitter to find out much about the Expedition except that I'm on it. Where is the fleet going and why?"

A Painful Experience

THE commander laughed. "That's easy," he replied. "Just at present the three moons, Iona, Karkor, and Tandal are approaching each other. They will come closer together than any moons have ever been since the beginning of history on Iona over two thousand solans** past. It happened to be just at this time that I perfected the gravity generator, thus enabling an exploring fleet to go to another world than our own when such a trip is easiest.

"The Expedition has three objects to accomplish. First, to demonstrate that an interplanetary voyage can be successfully made. Second, to search for traces of human habitation, present or past, on other worlds. Third, to obtain geological and mineralogical specimens which, by comparison with those of Iona, will show if the three worlds had a common source.

"In order that the work may be done as rapidly as possible, the fleet is divided into two parts, each of which has started toward one of the alien worlds. The crew of each ship has its own special mission to perform once they arrive. Thus it is expected that all work can be completed and the return started before the moons are too far apart.

"The destination of our branch of the fleet is Karkor, the smaller and also the farther of the two foreign planets. The part of the orbit of Tandal which is near the other two is between them and somewhat closer to Karkor. Indeed, Karkor and Tandal will come within a few diameters of each other at one time."

"Is there any danger that they will collide?" asked Kardel.

"No, they will not come close enough for that," Malben replied.

"Well, here it is time for the change of watch," he continued, as a bell on the chronometer sounded. "I will cut off all power from the generators so that the crew may take their stations without having to fight inertia."

A word to the engine-room sufficed to arrest the acceleration of the craft. Both men were somewhat taken aback by the bewildering sensation which immediately assailed them. Kardel feared at first that they were falling rapidly back to the tiny planet which they had just left, but he soon realized that the illusion of falling was caused by the cessation of the acceleration which had forced him back against his seat so oppressively. He made as if to rise from his seat, only to go flying into the air and bump his head on the skylight.

Malben laughed as the other pushed himself down from the ceiling, rubbing his head ruefully. "Be more careful," he advised. "You may break your neck, and we need you in the communication room.

"You go on duty now, don't you?" he continued, more seriously. "You had better hurry and relieve the man on watch. I intend to get a little sleep as soon as I give my relief the course; this extra weight is tiring. Well, good-bye!"

"Good-bye!" the other answered as he pulled himself down through the trap door by means of toes hooked under the ladder.

CHAPTER II

Uneasy Hours

LIFE on the speeding space-ship soon settled into a routine, with nothing to break the monotony of the endless day but sleeping and eating, with now

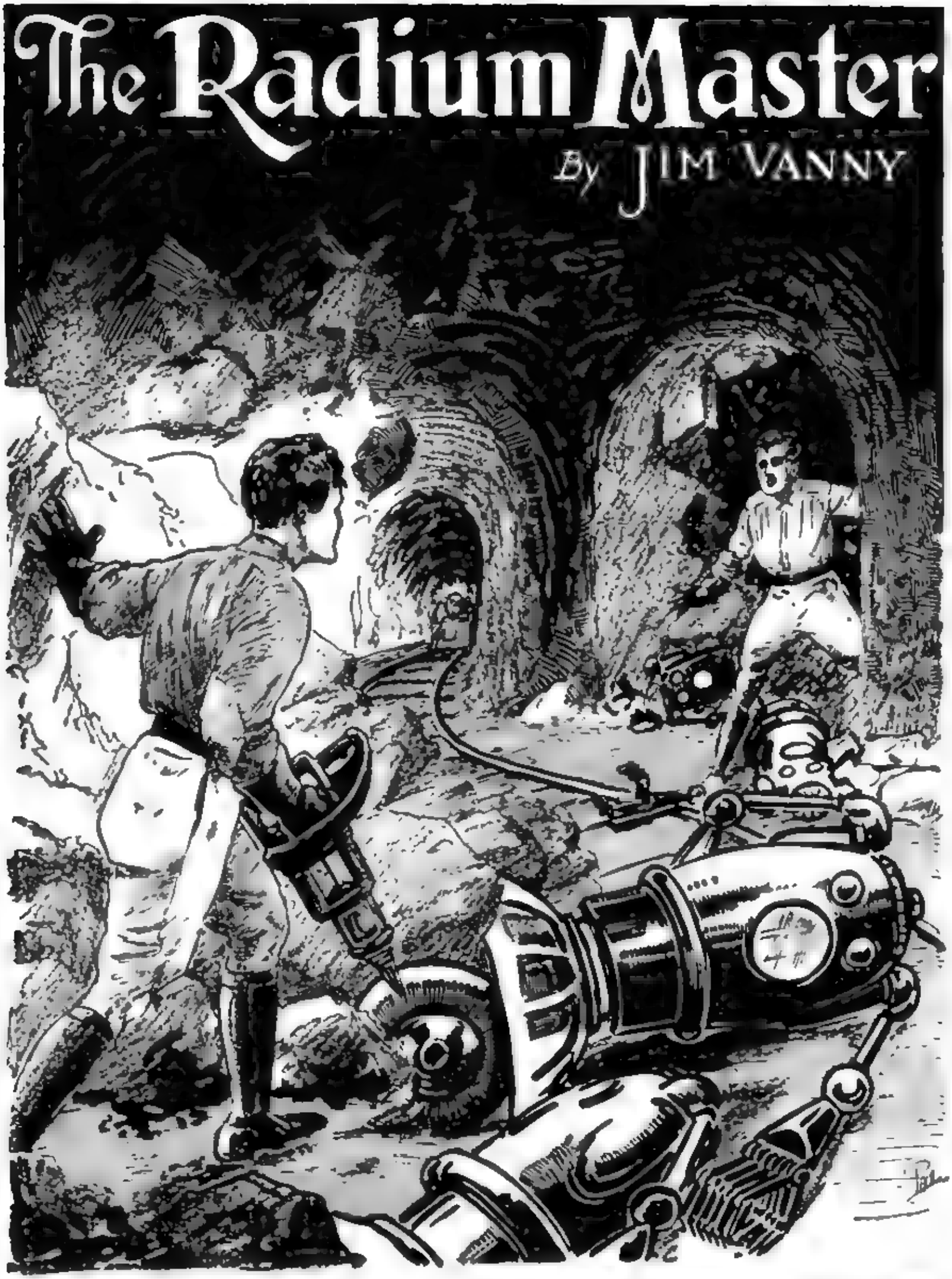
(*Continued on page 272*)

* Gold—atomic number 79.

** Solan—an asteroidal year, equal to approximately 4.7 terrestrial years.

The Radium Master

By JIM VANNY



(Illustration by Paul)

Several times in his mad flight he stumbled over prostrate robots. Then a figure appeared suddenly as if from nowhere.

BUT, Billy, do you really think it is true?"

Victor Leonard's question was directed to his thirty year old pal who sat in the chair opposite him.

Billy Carveth puffed on his perfecto in placid silence.

"Yes," he replied at length. "I myself have seen the ore and talked with Captain Kramer. He is a very good friend, you know. There can be little doubt as to the credulity of the tale. Kramer's word can be depended upon."

Victor cleared his throat.

"But think, man! A city of metal—a mine of radium—a world of unlimited power!"

Carveth nodded.

"Sounds rather mad, doesn't it? But true, nevertheless."

"There may have been some exaggeration."

Carveth nodded again.

"True. But there is a foundation—the ore proves that."

"Tell me the whole story," suggested the younger man, who was perhaps five years the junior of his friend.

The other puffed long on his cigar before beginning.

"It's a rather long tale," he said, "but interesting. When Kramer came back from his last trip of African exploration," he went on, "he told the Belmont museum for whom he was doing the work, this story of the city in the wilderness. But it seems they discredited his story. Old Belmont claimed he was only trying a scheme to get funds for his own use, so he let Kramer out of the museum saying that his tale was preposterous.

"So Kramer being an old friend as I have said, came to me with his story and asked my advice. He couldn't finance a return trip to Africa and he felt that somehow or other old Belmont took more stock in his story than he cared to show. Belmont is a great authority on radium, you know. But here's the tale.

"There are hundreds of square miles of unexplored territory in the Equatorial African jungles. In the Lake Victoria region there had been a report of a race of giants and it was on such a quest that Kramer was sent by the Belmont Museum. Kramer, an old authority on Africa, was the logical man to send.

"The territory was to be photographed and mapped by plane and they were to terminate their flight at Mombasa, the capital of British East Africa, and from there pack into the lake region with a larger force to be picked up at this point.

"There were five in Captain Kramer's party when he took off on his flight. There was a Swedish chemist and his daughter, Greta, who always accompanied her father on his trips of exploration. Then there was the pilot of the ship, Blake, and the navigator, Anderson, besides Captain Kramer, the leader of the expedition.

JIM VARNY

FAR in the heart of an African jungle lies the great and powerful city of Urania, the abode of the Masked Emperor. Far over the world extends the emperor's influence. From the bowels of the earth he extracts limitless power.

From this exciting theme, our author has constructed an adventure story that will thrill, and a scientific idea that has endless possibilities. We know that radium is one of the scarcest and yet most valuable of the minerals. Little is known of its properties, except that it is continuously decomposing and turning into other elements. It is used in healing and yet its power for evil is quite remarkable. It is truly a mystery metal, its elusive nature baffling the best of our scientific minds. And probably it is true that it will take a man like the Masked Emperor to finally discover its true nature and utilize its power. We are sure our readers will enjoy this splendid story.

"The plane they used was one of the latest types, a 1985 American Airways. It was powered with the very latest model Diesel engines and had a cruising speed of two hundred miles per hour, a low speed of seventy-five miles per hour, and a high speed of three hundred. She carried enough fuel for a flight of six thousand miles. This would enable them to safely make a long jump from Port Said, Egypt, to the lake region, cover it thoroughly, and make Mombasa with ease.

"All went well until they reached Uganda and were crossing the Budonga jungle. They ran into heavy clouds, that Pilot Blake was unable to get under or climb over. The instruments were efficient, to be sure, but over strange country such as the African jungles, one feels safer if he can get an occasional glimpse of the territory lying beneath him.

"This was bad, for it was in this region that they had planned to do their photographic mapping. So rather than give up without a struggle, Captain Kramer decided to fly around for a while in hopes that the clouds would soon dissipate. Of course, with a specially prepared emulsion, sensitive to the infra-red rays only, it is possible to photograph through fog and clouds, but the colors registered are not true and not altogether satisfactory. In addition, Captain Kramer wanted to see the country for himself with the use of binoculars, for then he could get a much clearer idea of what they must encounter afoot, than he could ever hope to get from the infra-red photographs.

"They cruised for hours but the clouds did not lift. So Kramer decided to head for Mombasa, land and wait for the weather to clear when he would return at a more fortuitous time in order to do his mapping work.

The Realm of the Masked Emperor

"BUT Kramer's party never reached Mombasa. Shortly after they turned the plane toward Mombasa, something went wrong with the motors. That was the strangest part of it all. Why should all the motors go wrong at exactly the same instant? Kramer couldn't explain it. He worked frantically with Navigator Anderson in an attempt to get four of them working again so that they might remain aloft. But it was impossible. They found that the magnetos of every one of the six motors had been burned out. Luckily, they came out of the clouds at about one thousand feet and there, lying almost directly below them they saw it."

"Saw it? What? The city?" Leonard asked tensely, leaning forward

Billy nodded.

"Yes. The city of Urania. The metal city. The radium city of the Masked Emperor."

"The Masked Emperor?"

"Yes. That is what the founder of the city is called. He is the supreme power within its limits. His word is the law of Urania"

"But who is he? What is he? Do they know—?"

Billy Carveth shook his head.

"No, they never found out. When they came through the clouds, the first thing they beheld was this city of great, lustrous white buildings, terraced up to small towers. These buildings reached out to a great distance, almost as far as the eye could reach, with only a dim outline of the fringing forest miles beyond.

"Directly below them was a great clearing—the Uranian airport. It was a strange city—a city of the future and as Pilot Blake put the ship down on the smooth runway and brought it to a halt, none of the occupants of the airplane could place it among any they had seen or heard of before.

"But now a strange appearing metal car was swiftly approaching them. It drew alongside their plane and a middle aged man alighted. He was a well-built fellow, tall and powerfully proportioned, with firm jaws and Roman nose. Above this they could not see. For he wore a tightly fitting mask that covered his eyes except for tiny slits and ran back over his head in a tightly fitting skull cap.

"They were informed that they were in the city of Urania and were cordially invited to make themselves at home. Rather dazed at the sudden turn of affairs and the strange surroundings, and having no alternative, they accepted their host's hospitality.

"They found that in Urania everything was done with or controlled by radium power. This Masked Emperor was the greatest radium wizard in the world. It seems he had completely solved the secret of radioactivity.

"They also found that many people came to Urania, but none went away. It was a city of secrets. It was a city where came the human derelicts of the world, who were salvaged by the ever active agents of Urania and sent to the city for a new start in life. Not for the interests of the man himself, but merely as a means for the far-seeing Masked Emperor to further his secret scheme of world conquest. In time Urania would spread its metal empire over the entire world."

"It all sounds like a fairy tale," interposed Vic. "Like a kid's bed-time story."

"But it's true," firmly asserted his pal. "All true. For when Captain Kramer and his party were ready to repair their plane and return to civilization, they were detained. The secret of Urania must not be known. They must give up their past lives and become residents of Urania. If not—" Billy finished the sentence with a shrug of his shoulders.

"Apparently they submitted," he went on. "But Kramer and the others firmly resolved to escape if opportunity afforded. The forest was dangerous, the rivers were not navigable even though he might be able to construct himself some sort of a crude boat or raft. And wild beasts beset the traveler on all sides

"There were weeks of patient waiting. But Kramer's opportunity came. He slipped quietly away from Urania one dark night and disappeared into the jungle. How he ever survived is a miracle—but he did. More hardships than he had ever imagined could exist fell upon him. But he struggled on and finally reached Port Florence on the western shores of Lake Victoria Nyanza. His body was weakened with fever and had it not been for the kindness of a British officer and his family, stationed at this point, he would never have survived to give me his story.

The Revenge of the Emperor

"BUT in spite of his illness, he never let out a word of the strange city in the wilderness. Only when he finally reached the Belmont Museum did he speak his first words of Urania. And after he had struggled so valiantly to bring aid to the remainder of his party held captive in this city and the first knowledge of this strange place to the world, he received only criticism and rebuff.

"Belmont himself said that Captain Kramer was only trying to protect himself after deserting his companions in the African wilderness. His proposal for a rescue trip, Belmont said, was only a scheme to get funds for his own use so that he might fly to some other part of the world and thus escape the just criticism piled upon his head.

"So he came to me with his story. Kramer says that the whole city, which occupies about twenty square miles, is undermined with tunnels—pitchblende and carnotite mines*."

"But, Great Scott! Don't you know what that means? Twenty square miles of pitchblende!"

"Yes," replied Billy Carveth. "And I am going to tell you just what it has meant to me. I'm going to find this Masked Emperor and his city of metal. He has built a city with the product of his mines. He has constructed buildings with this metal, lighted and heated it with the elements derived therefrom, constructed airships and floated them with the gases—"

"Stop!" cried Victor Leonard. "Are you mad!"

"Not mad, Vic. Only frightfully in earnest. If you

* Pitchblende and carnotite are two ores which possess radium and from a reduction of them by chemical and physical processes, pure radium is extracted.

doubt my story, you can hear it from the lips of Captain Kramer himself."

Vic paused a moment in uncertainty.

"It isn't you I doubt, Billy. Nor your friend and his story. It is my own sanity. Can such a thing be possible?"

Billy Carveth reached for the phone.

"I'll make an appointment with Captain Kramer and we can go into this thing thoroughly. That is—if you want to come in with me on this trip to search for Urania."

"If I want to? Need you ask, Billy?"

"Then that is settled." He dialed a number.

"Hello."

A voice sounded on the other end of the line.

"May I speak to Captain Kramer for a moment, please?"

The voice sounded again. Carveth's body suddenly stiffened. His eyes became fixed. His usually tanned face blanched. For an instant only he held the receiver, then suddenly dropped it to the hook.

"God!" he groaned. "God! I can't believe it!"

He turned quickly to his friend.

"Vic, we've no time to lose. If they know Kramer told me that story—"

"Billy, what do you mean! Tell me! What is it—"

"Captain Kramer was found dead in his apartment an hour ago! His head had been burned off as if by some terrific heat!"

CHAPTER II

Over the Jungles

BELOW the *Gull* lay a trackless tangle of African jungle. Indeed, had it not been for the low consumption of fuel by the highly developed Diesel engines of these 1985 airplanes, it would have been well-nigh impossible to traverse those forests in safety. For even now, four score years after the first flight of an airplane by the Wright Brothers in America, there had been little encroachment on the vast reaches of Equatorial African jungles by the progress of civilization.

To the left rear of the airmen lay the dark, turbid waters of the upper Nile, transformed by the sunlight to a twisting silver thread that looked to have been thrown carelessly into the forest below.

The northern shores of Lake Victoria Nyanza were to be seen dimly through a hazy sky. Scenes of marvelous beauty lay unveiled as Billy Carveth and Vic Leonard sped swiftly over these unknown regions. Had it not been for the haze, the entire expanse of Lake Victoria might have been visible with the haughty crown of Mount Kilimanjaro towering beyond.

Presently Vic turned to his companion.

"It was quick work, the apprehending of that fellow who killed Kramer."

Billy nodded.

"Yes, but only through carelessness on his part. That radium gun he carried was enough to keep off a whole army of ordinary weapons."

"It'll be a big help to science, the capturing of that gun," went on Vic.

"Yes—but how about the four people who compose the remainder of Kramer's party? If any harm comes to that Uranian agent, I'm willing to bet one of them, maybe all four, has to pay for it. That is why it's up to us to locate that city and bring aid before some serious harm befalls the Swedish professor and his daughter and the two aviators with them. Even now it may be too late."

"I hardly think any harm will come to them so long as they submit to the will of the Masked Emperor," was Vic's opinion.

They sped on.

"Say—how's our course?" asked Billy suddenly.

Vic consulted the charts, acting as navigator at this particular moment.

"O. K.," he replied. "Better cut down our speed a bit, though. We're getting over the supposed location of Kramer's city."

"Righto."

He reached for the throttle to cut down the speed of the three motors, for the *Gull* was a smaller ship than the one Captain Kramer had used for his ill-fated flight.

But as he did so, a strange thing happened. Without warning, all three motors suddenly ceased to function. With effort born of grim desperation the two men struggled with the motors. But their efforts were in vain. The magnetos of each motor were burned out!

"Look!" Vic was pointing ahead, directly in line with the nose of the ship. The plane sped swiftly forward. In the sunlight there appeared great towering buildings, tall spires and terraced streets.

"Urania!" gasped Vic in a curiously awed voice, and Billy only nodded.

A minute later the powerless airplane was hovering over the flying field that Captain Kramer had described. Below them figures were moving quickly about but they were indistinct in the haze.

Then with skill born of long experience, Billy sent the ship down, down, down in a long glide to the level of the airdrome below.

"Well," he murmured in a low voice. "Here we are."

Vic grinned cheerlessly.

"And like we planned *not* to arrive," he answered.

"Say," cried Billy. "What happened to those motors?"

Vic shook his head.

"That is something I haven't been able to figure out. The same thing that happened to the Kramer party, most likely. It's a mystery, but I'll bet it has something to do with this city."

"Look! Here comes the car Captain Kramer told about!"

The Masked Emperor

ACROSS the very smooth flying field came a strangely shaped car. It was supported by two wheels in front and one in back and was evidently some sort of a service car for the airdrome. The two men were curious.

They noticed that the lower terrace of buildings which surrounded the flying field on three sides, was very high and they were undoubtedly used for aircraft

hangers. The adventurers wondered what sort of aircraft these Uranians used.

But now the strange car had drawn up alongside the *Gull* and a small, heavy set man alighted.

"Welcome, strangers," he greeted them as Billy and Vic climbed down from their seats in the plane.

"Then you *do* speak English," Vic ventured.

"Oh, yes. But be seated in the car, I beg you. You must accept our humble hospitality."

"We must apologize for using your airdrome without your permission," said Billy.

"But I assure you, you are quite welcome. That is what airdromes are for you know," smiled the other.

"I'm afraid we are lost," Carveth informed him. "May we inquire the name of your city?"

"I am afraid I must refer you to the Masked Emperor," replied the man with regret in his tone. "I shall conduct you to him at once."

The two nodded and took seats in the strange car. An instant later they were rolled away toward the side of the flying field.

"Your airplane shall be taken care of," assured their host.

They soon entered a large waiting room at the edge of the air terminal and from here were conducted to an elevator which bore them swiftly upward.

When they alighted they found themselves in a large room. It outdid any futuristic work either of the men had seen anywhere in the outside world. It was done on the circular plan. The room itself was triangular—the furnishings were triangular, the walls were covered with triangular designs and even the doorway was curved into a graceful arch.

Nowhere could they detect a window. The room glowed with a beautiful green fluorescence.

From here their guide conducted them through a passageway and into another chamber, much larger and designed on the cubic plan. In one corner of the room was located a large desk or control table, covered with various buttons and switches. And behind it sat a well built man with a black mask hiding the greater part of his face.

"The Masked Emperor!" broke out Vic, involuntarily.

The man arose and stepped out from behind his desk with a smile.

"My fame has extended far," he said. Then turning to the guide. "That will be all, number sixty."

Then he turned back to Billy and Vic.

"Look," said he with a sweep of his arm.

The two men turned their gaze to where he pointed. Before them was a large window and as they looked beyond it, gasps of astonishment escaped them.

They were at the very highest point of the city. It was beautiful to look upon.

Away out beyond them the far-flung city was besieged by jungle. It seemed to be valiantly holding back the surging surf of trees that were futilely trying to encroach upon those whitish metal buildings. But they only raised their terraced heights and lofty spires above the treetops making Nature's proud works but pigmies in comparison.

There were many towers such as this, but none as tall. There were four great windows which gave view of the entire surrounding country.

And far below them lay the airdrome. They could see their airplane. It was besieged by figures and was being towed swiftly to one side by a car similar to the one their guide had used.

And as Billy Carveth studied the figures, even at the great distance, his sharp eyes caused a puzzled look to cross his face.

"Surely your men don't wear armor—" he paused.

The other bowed.

"I ask your pardon for not introducing myself," replied he. "But here I am known as the Masked Emperor. I am afraid I haven't any other name."

"Let me introduce myself," begged Carveth. "I am William Carveth, of New York—"

"I am very glad to make your acquaintance, sir—"

"And this is my good friend, Mr. Victor Leonard, also of New York."

"It is an honor to have you gentlemen with me," returned the Masked Emperor. "But let me have your rooms prepared. You must be fatigued. And hungry. We will talk later. And your ship—it will be well taken care of."

The Emperor Entertains

THE two flyers bowed their thanks and the man with the mask touched a button. A few minutes later they found themselves assigned to the most beautiful quarters they had ever seen.

They bathed and dressed in the clothes that they found laid out for them. Then they were once more escorted back into the presence of the Masked Emperor, this time in a luxurious dining room, and always by the same heavy-set man.

"You asked me about the figures in armor," spoke the masked man as they ate. "Those are not my men you see out there. It is quite unnecessary to expend human energy for common labor. The men you see are mechanical men, metal men, controlled by stations throughout the city. They are what we call robots."

"Robots!" exclaimed Billy. "How interesting. How wonderful!"

Their host bowed.

"I am glad my system pleases you," he returned. "You see, my man power is employed wholly for the brain power derived therefrom."

"But the men in your city? Surely you have enough—" began Vic.

The Masked Emperor wagged his head patiently.

"If I were to adhere to the old conventional way of the present world—yes. But when the brain of one man can be employed to control a hundred mechanical men whose working power is ten times that of an ordinary man, what does it do? It makes one man do the work of a thousand with half the effort. Human physical labor is at a minimum, while the expenditure of brain power gives them an interesting as well as progressive occupation. Each man is a leader in himself. And as each man's proficiency increases, so does his position. As the men advance, so the city grows. It must grow. You see?"

Carveth nodded.

"And is the city growing as you wish?" he asked.

The other shrugged his shoulders.

"I cannot complain," he answered evasively.

He pressed a button on the side of the table. A minute later a small door opened and a strange figure entered the room. He was about the size of a man, but moved on wheels and when he stopped he balanced himself effectively by dropping in front and in back of him small supporting discs to the floor. There were arms pivoted on what were evidently universal joints and a barrel-like body in which two eyes gleamed. There were no unnecessary moves, no words, the figure simply deposited the second course of their dinner on the table and carried away the emptied dishes of the first.

"Such is the efficiency of Urania," said their host with a smile as Billy and Vic sat open mouthed at the performance. "And in the meantime perhaps you would like to know what the outside world is doing."

Arising, the Masked Emperor went to a beautiful cabinet on one side of the room. The entire front of it was a maze of ivory keys and he pressed one after another.

"No fooling with dials," he explained. "Just punch your combination and listen to your station."

An instant later they were listening to New York, so many thousands of miles away from the strange city in the heart of the African wilds.

A moment later, the masked man pardoned himself and went out rather hastily at a visit from the man whom the flyers had first seen upon their arrival in Urania.

"Well, what do you make of him, Billy?"

Carveth chewed thoughtfully on the delicious steak that the robot had set before him.

"Can't—say," he mumbled between bites. "It's a cinch we've seen nothing of Kramer's four companions. Not a human being, in fact, except this Masked Emperor, as he calls himself, and his fat lieutenant. But he certainly is the man Kramer described alright. Acts just as poor old Kramer said he would."

"But those robots—"

"Kramer never mentioned them. He spoke of the mines. This masked marvel may not have had the robots perfected when Kramer was here."

"What about the girl?"

"I can't say. I don't know whether I'd know Greta now. I've seen her once or twice at the Belmont Museum when her father was giving a lecture. I'd know the old man, but the girl was only nineteen then. That's been three years ago."

"It's all a queer mess, anyway," was Vic's opinion as he turned back to his food.

"No, I don't agree with you," argued Billy. "On the contrary, I'm inclined to think it's all as clear as day. This Masked Emperor wants power. He has it here, but it don't satisfy him. It's the kind of power he wants but not on a large enough scale. He wants to be recognized by the powers of the world. There is conquest. Urania is alright as a start, but he's outgrowing it—like a child outgrows a toy. Don't you see—"

Vic nodded comprehensively.

"I *do* see, Billy. Good God! Is it possible? Is he mad?"

"No—not mad. Unfortunately he is a coolly calculating conqueror—and he has everything to do it with."

"But the radium—what of it?"

"Therein lies his power," replied Carveth. "I believe he has solved the secret of controlling the energy stored in radium. And if he has—I hate to think of what the outcome may be."

In a half hour their host returned.

"You will pardon me for my absence," he pleaded. "It was quite imperative that I should go."

"It is quite alright," assured Billy. "And allow us to compliment you on the excellence of the food."

The man bowed his acknowledgement.

"I hope you have enjoyed the radio program," he said.

"Very much so," replied Vic. "Only a touch of home makes one anxious to be headed that way again. We must see to our plane at the earliest possible moment."

"In the meantime, you must allow me to offer to you what hospitality I am able to present," quickly interjected the man as if anxious to change the subject.

"Most certainly. But—"

Billy paused in the middle of his sentence and turned an attentive ear toward the voice on the radio.

> "——has been found guilty of the murder of Captain Ralph Kramer of New York City. He has been confined to a psychological institution where his case will be kept under observation in hope of assisting him back to normality. He is an Italian but refuses to give any information whatsoever about himself or his home."

As the announcer finished, there was a sudden gleam in the eyes of the Masked Emperor. But quick as it came it disappeared again and he turned suavely to his guests.

"Even in this day and age they will not stop at murder," said he, but there was a strange note in his voice as he spoke.

CHAPTER III

Confined!

"WHERE do you suppose we really are, Billy?"

"On the map, you mean?"

Vic nodded.

"Yes—of course."

"You know as much about it as I do. We are in the city of Urania. And it seems like years have passed since we arrived, yet it was only two days ago."

"Two days or two years, it is all the same. Our genial host has made it plain that we are now citizens of his conquering Utopia, whether we choose to be or not."

"Oh, we'll find a way to escape," was Billy's optimistic opinion.

"Not through that jungle," and there was finality in Vic Leonard's voice. "I'd like to meet some of those fellows we met yesterday and have a little private talk with them. I'll bet there's more than one who'd like to get away from this place."

But Billy did not agree.

"I think you're wrong," he said. "They've all been lured here with promises of something big. To them the control of a board of robots is power. While they have brains enough to understand the operation of the mechanical men, they cannot see their eventual end under the rule of this Masked Emperor."

"There goes the signal light," said Vic, pointing to a flickering dot on the wall of their none too elegant quarters. For upon becoming robot control students of Urania, they had been transferred from the beautiful surroundings of their first night's stay in the city.

Billy groaned.

"Back to the training table," he sighed. "Robots, robots, robots—will we ever see or hear of anything else?"

"Not if we let it get on our nerves," replied the other.

Down they descended by a smaller elevator than that in which they had first ascended to the chambers of the Masked Emperor. Deep into the heart of the city they were carried, to take their places at the robot training table with dozens of other newly arrived citizens of Urania.

In a long room they were seated at tables which were a maze of diagrams and buttons. It was a rather complicated affair and required concentration, but under able instructors, the greater number of the students progressed quickly.

The robot number must be punched, the exact location of the work, the work desired, the energy required, contact and release switches—everything that went to make the perfect robot. And the system was developed to perfection.

The greater number of the robots were used in the pitchblende mines below the city. There was a gigantic operators' room on the lower level of the city and this was divided into sections representing the different levels of the mines. There was a main operator for each level and assistant operators for each tunnel. A diagram of the level showed the operators just where their robots were working and what they were doing. In this manner all danger of underground work was eliminated for the human as well as the danger of the highly radio-active ore.

* * * *

For a month Billy Carveth and Vic Leonard worked unceasingly at the instruction table. Then they were assigned to different control stations and sent out.

"So long, Vic," were Billy's cheerful words as he turned toward the North Section.

Billy gripped his friend's hand.

"So long, old man—for the day. We must compare notes every night in quarters. Keep an eye open for Olsen and his daughter and the two flyers. A month and no sight of them. It doesn't look very encouraging to me."

As Billy vanished and Vic prepared to take his position on the South Wing controls, Rogers, the chief robot instructor, came up to him

"Carveth," he said. "We're installing a temporary control station directly over the new lower level tunnel in mine number 7. There is only a crew of five robots working this tunnel until it is enlarged. Go down there and take charge of that control board. It'll be good experience for you. There is a man working there now on the new energy installation who will give you all necessary information. His name is Olsen—Dr. Olsen."

At the mention of the name, Vic started, but quickly recovering himself, immediately obeyed the order. It was the greatest piece of luck he had known for a long time.

A Meeting in the Tunnel

HE made his way to the tube car station and waited for the next train to the South Side of Urania. Not a human being did he see on the way to the station, only an occasional robot working mechanically at some assigned task. The sight of the robots had become familiar to him now and he paid little attention to the mechanical men.

A light glowed over a train entrance gate and a moment later Vic had stepped aboard a tube.

There was only one other person in the tube beside Vic. It was a girl. Where had he seen her? Leonard wracked his brain to recall where he had seen those blonde features before. And then he made up his mind.

"I beg your pardon, miss," he addressed her. "But I was wondering if you could direct me to a Miss Greta Olsen supposed to be located on the South Side of this city."

The girl turned to him with a cry of surprise.

"Oh!" she cried in embarrassment. "Why—I—I am Miss Olsen."

Vic felt a surge of triumph.

"I am Vic Leonard—of New York City," he said quickly. "Your father and the two flyers? Are they safe?"

"Oh, then you've come to take us away! Thank God for that!" cried the girl as if relieved of great suffering.

"We have been searching for you for a month."

"We? Who are we?"

"An old friend of your father's—Billy Carveth."

"Billy Carveth!"

"Yes, but you haven't told me of your father yet, and the two flyers," reminded Vic.

The girl paused a moment as if to collect her thoughts.

"Daddy is all right," she said, "but the two flyers—Blake and Anderson—they escaped almost a month ago, the night of May 12th to be exact. I know, for I have kept track of the date hoping they would get through. But I am afraid it is too much to wish for. When you spoke I thought you came from them—"

"Captain Kramer got through," explained Vic. "That is why Billy and I are here."

"I am so glad," cried the girl. "Then he is all right—"

"I'm sorry," replied Vic. "Kramer was murdered in New York. Killed by one of the Masked Emperor's agents to prevent his telling the story of Urania. But the man was too late. Kramer had already told his story—first to Belmont and then to Billy Carveth. You see, Belmont wouldn't give the story any credence."

The girl frowned thoughtfully.

"I don't trust that man," she said. "There is something about him—oh I don't know what it is, but it is something sinister. He is not to be trusted."

"But your father—Rogers said he was working on a new installation in temporary station number 7. That is where I am bound. I am going to work under him. It is our chance to plan our escape."

"Thank Heaven," murmured the girl fervently.

"But you—what do you do?" inquired Vic.

"Oh, I am kept busy as a television operator. There is a record of every conversation kept here in Urania, together with a picture of the conversationists."

"I see. And there are other girls so employed?"

"Many. Also as school teachers."

"Schools? There are children here also?"

"Oh yes. The people of Urania have their home life and raise their children the same as in any other city. But here is our station. Father and I live near station number 7. He is up there working now. Good-bye Mr. ——"

"Just call me Vic," corrected that young man. "Under the present conditions, I hardly think we need bother with formalities."

The girl smiled warmly.

"Good-bye, Greta."

The Secret of Power

VIC LEONARD went to work with interest in station number 7, South Side. The joy of Dr. Olsen knew no bounds at having a friend at last working at his side.

"Now we can work together and eventually plan an effective escape," he said. "In the meanwhile we must do our work well and do nothing to arouse suspicions."

"It is a great power this Masked Emperor has," went on the Doctor. "It is the harnessing of this energy that has made possible the building of Urania. But if it ever gets beyond his grasp—" The Doctor shook his head significantly.

"You mean it is as powerful as all that?"

"Yes. The mines are run by separate power plants. But the power for the city is generated from one main power plant, located centrally below the city. If the radium concentrated in that one spot were ever to be turned loose, the entire city would be reduced to nothing!"

"I had no idea there was such a power," Vic said, slowly.

"Ah, my boy. You do not realize the power, nor what a man can do when he learns the secret of harnessing radium. And this man has not only learned the secret of harnessing this power—he has discovered such a vast store of it in Nature's bosom as man has never before dreamed could exist.

"Through a thorough understanding of chemicals, the Masked Emperor has been able to do much more. He has been able to use it for all manners of coloring, and also for lighting purposes, creating different colors and brilliancies by a different combination of its properties. We know ourselves that radium has been used for years in the manufacture of opalescent glass.

"He also manufactures radium salts which he is able to use in any photographic work necessary. And after the valuable elements are extracted from the pitchblende and carnotite, it is manufactured into a powder which is used as a fertilizer for agricultural purposes. For no matter how careful the process, it is impossible to extract every last particle of the radium elements from the ore. Thus it charges the dead earth, giving it fresh life for growing purposes."

"But the value of the ore?" asked Vic. "Surely it is tremendous."

"Oh, yes, my son. It is too great to estimate. In gold it would bring him millions. But possessing the secret he does, it can bring him the entire world. He can have possession, conquest, power."

"But surely it is a difficult task to separate the uranium and radium from this pitchblende and carnotite. He must have wonderful laboratories for this work."

"The separation is not so difficult for him," replied the Doctor.

"And his air force?" Vic wanted to know. "What kind of ships does he use?"

"A gigantic Zeppelin type airship," replied the Doctor. "It is something that he has designed himself."

"You see," Olsen went on, "the energy stored within radium has been the subject of discourse on the possibilities of the element as a means of generating power. For years this has been dreamed of but never accomplished. The secret has always remained unsolved. But the Masked Emperor has solved the secret. And it is his secret alone. Perhaps a few of his closest lieutenants also share it. But not many.

"And here also he has safeguarded his city. For his ingenious mind has evolved not only a process of using direct radium power, but also of using the radio-energy for running giant electrical generators. So if his direct radium power in any way fails him, he can fall back on the electrical."

"It is the most marvelous thing I ever heard of," murmured Vic, deeply absorbed. "But the robots. I do not understand them."

"The robots are controlled by a polonium flow," explained the Doctor. "A specially constructed tube runs the length of the shaft, a contact point and branch shaft being run off at each tunnel on the different levels. The movement of the robots are controlled by the polonium vibrations which in turn are controlled by the robot operator at the controls above."

"It must be a wonderful sight to see such a marvelous laboratory in action," Vic mused. "But tell me. Do you know how all these things are done?"

"Only what is public knowledge," replied Dr. Olsen. The separation methods used are of course those that have been known for years, only they are used on a much larger scale."

"You said that he gets not only power from his radium, but also light, Doctor. Do you know the secret of this?"

"Yes. There is no great secret to it. We know that when solid uranium salts are crushed, shaken or rubbed they emit light, that is, they have the property of triboluminescence*. This may readily be observed if one experiments in a darkened room. By varying his elemental combinations, and keeping his element under a constant pressure, light is thrown off to any extent the Masked Emperor wishes."

* Light that arises from friction.

"There is one more thing I should like to know, Doctor," said Vic. "What happened to my magneto when I flew over Urania?"

CHAPTER IV

A Hidden Danger

DOCTOR OLSEN smiled mirthlessly.

"That is another secret I cannot explain in detail," he replied. "But the principle of the thing is a radium wave, which when adjusted to the proper wave length, is attracted by the electricity of your magneto and as its sudden, high frequency vibration strikes it, the magneto is burned out."

"That must have been what happened to Kramer."

"Exactly."

"It is all so unbelievable," said Vic. "But the central power plant—just where is it located?"

"Almost directly beneath the main junction of the tube cars," replied the Doctor. "It lies very deep. Several miles, perhaps."

"You see," he continued, "none but the Masked Emperor's most trusted lieutenants are allowed to operate the robots in this section of tunnels. A slip would mean that the radium chamber might be broken open. Then nothing could save the city, for once it got into the tunnels, it would quickly spread out and upward, sweeping over the city like a terrific wave of fire. There is so much concentrated there—no one knows how much."

"I don't understand why he operates so close to it," puzzled Vic. "Surely he realizes the danger."

"Greed, my boy. Greed. Such men are always given to greed. He would rather take the chance than throw away one particle of his radium power."

"I see. Then it is really a very dangerous power he controls."

"Very."

"Then we must lose no time," urged the younger man. "At any time something may happen to loose the power of this radio-active generator."

The older man shook his head in apparent dejection.

"The spirit of youth," said he, rather sadly. "Always hopeful, always looking on the cheery side. Oh I wish to escape. But I fear you do not realize what a terrific obstacle we are up against. Well, perhaps it is well. I shall be ready to do my part at your bidding."

* * * *

Another week passed in Urania. Billy and David, accustomed to their jobs by now, spent every spare moment in the planning of their escape. They were not guarded in any way, either on or off the job, and they concluded that the Masked Emperor of Urania had no fear of his people escaping, should any of them care to do so. The dense jungle was impenetrable. Kramer had made it. But it had been five weeks since Blake and Anderson disappeared from the city.

Frequently the two visited Doctor Olsen and his pretty daughter and the friendship of Greta and Vic Leonard had grown to be something more.

"I am glad," were the Doctor's simple words to the couple. "For now you at least have each other to live for, even in this grim city of the future."

"And now, if ever, I have reason to escape," replied Vic. "Never now will I submit to this man. We are going away soon. Billy and I have our plans almost perfected. Next week we shall leave the city."

"But how?" asked the girl anxiously.

"By one of the Masked Emperor's small airships. We intend to capture one and so effect our escape."

"Impossible!" was the Doctor's word. "They are watched day and night. You would be overwhelmed by robots."

Vic smiled.

"But remember, we too know something of these robots. We shall first paralyze the system controlling the hangars. Then we shall have nothing to do but open the doors and fly away."

"But the radium guns? Surely—"

"They too, shall be rendered useless by injecting some neutralizing element. That is your job, Doctor, to determine this element."

"I shall do it," replied the elderly man. "We are undertaking a tremendous task. If we do not suceed it will mean death for us all."

"But we must succeed," cried Billy desperately. "Not only for Greta and Vic and ourselves, but for the entire world!"

The scientist nodded thoughtfully.

"Yes. For the entire world," he repeated.

A sudden blinking of the television signal took their attention. On the screen appeared the face of the Masked Emperor himself.

"Carveth and Leonard," said he. "I should like to see you at once. Something of the utmost importance has come up. Can you see me at once in my chambers?"

"Why—certainly, sir," replied Billy, and the screen became blank once more.

The two young men turned with puzzled expressions to the scientist at their sides.

"Now what do you suppose he wants?" queried Vic.

Dr. Olsen shook his head.

"I'm afraid," cried Greta. "He sounded so strange. Oh, don't go! Don't!"

"Nonsense," replied Vic. "Everything is all right. Now, if any time, we must keep him humored."

Billy frowned.

"Let's not keep him waiting," he suggested "I am anxious to know what he wants."

With hurried good-byes they departed, to be borne swiftly away to the chambers of the mysterious ruler.

"Resistance is Useless!"

IN the main tower, the Masked Emperor sat behind his highly sensitive control board with a sneer of contempt for the two figures that stood before him.

"It was very cleverly arranged," he was saying. "But you overlooked a most important point. You see, I have the entire city under the watchful ear of a little device similar to the old time dictaphone. So naturally everything is recorded that goes on. You are wondering why I tell you these secrets. That is because you are the first persons to attempt such a daring plan of escape. So of course your fate will render it quite impossible for you ever to betray my secrets . . ."

"What do you mean?" burst out Vic.

The sneer turned to a look of stern reality.

"The radium tunnels can use human labor," he replied. "And then, my robots may like company. Who knows."

"Now listen to me," hissed Billy leaning toward the man with the mask. "You may be the Masked Emperor or anything else you choose to call yourself here in your own little world. But don't go too far. You've gotten away with so much you don't know the meaning of defeat. But I warn you, it is coming to you. You can go just so far. There will be investigation."

The man laughed.

"Do you think you can bluff me? And do you think I do not know who you are? Don't I know it was Ralph Kramer's story that brought you here? And because Kramer got through to civilization after his escape from Urania, you really expect Blake and Anderson to do the same, don't you? Well, let me tell you that neither Blake or Anderson will ever come to your aid. Their bodies were found not fifteen miles out of the city. Exhaustion and exposure did for them. How Kramer got through is beyond me."

"And perhaps it would interest you to know that the entire combined powers of the world could not conquer me. On the contrary, I can conquer them. And I shall do so. As for you——" he shrugged his shoulders and pressed a button.

A minute later a robot walked into the room and stepped between the two men.

"Resistance is useless," the Masked Emperor informed them and pressed another button.

Strong, cold metal fingers of steel clasped each by an arm. In spite of the masked man's words they struggled while the man at the control table looked on with silent amusement. For their struggles were useless. Soon they were carried to an elevator and an instant later felt it dropping beneath them.

It seemed ages before they felt the motion arrested. Not a word was spoken. It seemed like being carried away by grim death itself to be in the power of the robot.

The door of the elevator slid open and they were hurried into a long narrow passage by the mechanical man. The light was a soft phosphorescent glow and as Billy and Vic looked about them, they saw many robots working mechanically in the rocky formation.

"They're going to separate us, Vic," cried Billy as another robot came forward and grasped him by the arm. "Don't give up, old pal. And if you're listening in, Mr. Masked Emperor," he shouted in a louder voice, "we'll be seeing you in Hell before we give in!"

* * * *

There followed days of laboring at the mineral that gave the Masked Emperor his power. There were nights of torture among mechanical men that never ceased to work; never slept; never ate; never spoke. It was all a hideous reality for Vic, but he struggled on in vain hope. His food was brought to him once daily by a robot. His bed consisted of a pile of dried moss at one end of an abandoned tunnel. At first he tried to keep track of time, but once he misjudged and failed to wind his watch in time. From then on time was as nothing—only a never-ending nightmare amid silent, half human machines and tunnels of pitchy black ore.

The interior of the mine was hewn from solid pitchblende with an occasional intrusion of that orange-yellow amorphous, gum-like mineral known as gummite. In many places the formation was soft and broken and here the tunnel had been cased with metal sleeves which kept the soft rock from falling in and blocking the passage. There was such a metal sleeve about twenty feet long at the entrance of the tunnel where the elevator door was located.

The ore was transferred from the mines by means of an ore car as in any other mine and thence to the surface by an ore lift.

A Desperate Chance

IT was Vic's rest period. Wearily he stumbled along the rocky walls of his tunnel home. Here at last he could get away from the sight of those mechanical things for a few hours. How the Masked Emperor could assign one to such a fate as this he could not understand.

Vic threw himself upon his bed with a deep sigh of resignation. It was a hard struggle to keep up with. Never before in his life had he been confronted with such a baffling situation.

As he lay there on his bed of dried moss, Vic's attention was suddenly drawn to the end of the old tunnel which lay only a few feet from him.

Water seepage at such a depth was no new sight for Vic. In fact, pumps were kept going night and day to keep the tunnels free from water. But this seepage was different. Closely he examined it. It seemed a stream of light rather than water coming through a slight crack in the rocky wall and trickling down to the floor of the tunnel where it lay in a pool of scintillating rays.

Vic was puzzled.

"What can it be?" he mused thoughtfully to himself.

But he could not understand it. And instead of getting his usual sleep, Vic sat and puzzled on the strange phenomena.

That it contained radium there was no doubt. It must contain a great amount of radium to glow such as it did. It was dangerous to sleep so close to the seepage. He might in some way get some of it into his system thus causing an incurable disease of the bones. Or it might inflict a severe burn while he slept.

Where did it come from?

Vic puzzled through two work periods and another rest period before he finally came upon the solution.

The robots, under the control of their robot operator had abandoned work on another tunnel. Carefully Vic studied the situation. He noted that the tunnel abandoned ran off the same main level as his own and almost parallel to it. The two tunnels were separated by not more than fifty feet. The second had been abandoned at approximately the same depth as the first.

Vic next checked over the layout of the city as near as he could remember it in relation to the elevator shaft which had carried him to his prison. It was not far

removed from the Masked Emperor's chambers and the main tube car terminal. And below this lay the main radium energy generator! That was why they ran the tunnels only so far. It was as Doctor Olsen had told him. Only this tunnel had run into a small fault or crack which had gone unnoticed. In time the radium seeping through would break down the barrier and be loosed. But it would take time—unless— Vic decided that now he must make the most of the opportunity offered.

It was an hour after Vic had gone back on his work period. What time it was on the surface of the world he had no idea. Nor did he care. He was too busy thinking. Twice during the past week he had seen Billy pass from one tunnel to another. If he could only show up now.

Vic carefully worked the radium cutting-gun in his hand. The green ray from its muzzle instantly cut away anything it came in contact with. He thought of the notes in his pocket that Billy had dropped on the floor for him to later pick up as he went off shift.

"There is another elevator shaft 200 feet beyond this one."

And the second read:

"Let me know when you're ready to start something."

Well, he would let Billy know in a few minutes now if all went well. He would have to work fast.

Beyond him he could see the elevator shaft and the tubes which controlled the polonium flow. Craftily he increased the vibrations of the radium gun in his hands. It would take a lot of energy to reach that shaft, but it must be done. He must match his speed with that of the robot operator above.

With a sudden thrust he gave the cutting gun full power and whirled toward the tubes. There was a snapping of metal as the well directed rays went true. Polonium tubes, elevator controls and guides were cut in half as well. As if by magic the robots about him seemed suddenly to have lost their life and dropped with a metallic clatter to the floor of the mine.

The Emperor Revealed!

BUT Vic waited to see no more. Running quickly from the tunnel into the main level he once more brought his radium gun into play on the metal sleeve supporting the tunnel walls and roof. There was a sudden rending of rock and metal and Vic sprang away as tons of rock crashed into the passage. From away up the shaft he could hear an ever increasing roar and he knew that the elevator car, deprived of its supporting power was speeding swiftly to destruction.

He ran on. Several times in his mad flight he stumbled over prostrate robots, but recovered himself and rushed on. Then a figure appeared suddenly as if from nowhere.

"Billy!"

"Vic! For God's sake, what has happened?"

"You wanted me to start something, Billy. I've done it!"

With breathless haste they hurried on. Vic's radium gun had undoubtedly cut the main level control.

"The other elevator is run separately," explained Billy as they hurried along. "We'll wait at the other one. Repairing the damage you've done is beyond the power of a robot. Someone will be down. Oh, if old Masked Emperor himself would only show his face now!"

"If not, we'll have to take care of him when we get to the surface. In the meanwhile we'll have to work fast. Get them as they step off the elevator. You see—?"

"Do I?" cried Billy. "Watch me!"

"And when we reach the level of the city we must get the operator at the head of the shaft before he gets us."

"We'll do it," replied Billy grimly.

The shaft was reached. The emergency elevator had been put quickly into service and already was on its way to the scene of the trouble.

And two figures crouched at the gateway, each armed with the handle of a radium cutting-gun, ready for action. It was a desperate situation, for it meant life or death to the captives.

A light appeared in the shaft. An elevator appeared, three figures stepped into the tunnel. Two arms descended. Two figures slumped to the tunnel floor. The third turned upon the attackers with the snarl of a trapped animal."

"The Emperor himself!" yelled Billy with a ring of triumph in his voice.

The man said no word. He made a dive for one of the inert robots. In an instant he had wrested a radium cutting-gun from its motionless steel fingers.

But Vic had been quicker. He made a clean tackle of the man and both went to the muddy floor of the tunnel in a heap. The gun beam gleamed out. The far corner of the tunnel was cut off and it hit the mass of broken rock beyond. And at that instant there came a terrific roar from far back down the main tunnel.

"The elevator!" yelled Vic at the top of his voice. "It's the elevator crashing! We must get out—"

A colossal roar welled up. In the dimness of the tunnel Vic motioned his pal to get aboard the elevator. The Masked Emperor started to follow. But even as he did so, his mask, loosened from the terrific struggle with Vic Leonard, dropped from his face. In the half light of the tunnel the long hidden features were revealed.

"Belmont!" cried Billy hoarsely.

A shriek of rage escaped the man's lips. He turned toward the two again, but had taken but a step forward when the whole roof of the tunnel collapsed upon him.

"Up!" yelled Vic with a thrust of the control lever, and a moment later they were speeding swiftly toward the surface once more. He had reached the car with not a fraction of a second to spare.

At the top of the shaft the car halted. Guns still in hand, Vic and Billy threw open the gate. Before the surprised robot operator could open his mouth, he was lying senseless on the floor while Vic was calling the hangars and ordering one of the small airships put in shape for immediate flight.

"Now for the last act," he said turning to Billy. "We must find Greta and her father."

Again they sped away toward the South Side of Urania. It was late afternoon and Greta should be returning now to her home.

This time luck favored them. The girl had just arrived and Dr. Olsen, sensing that Vic and Billy might have had something to do with the accident, had made it a point to keep a sharp lookout.

There was a brief moment of embraces and handshakes.

"And now to get to the hangars," cried Billy. "We haven't any time to lose. Sooner or later they'll discover that beaned operator, if you'll permit me to use some old-fashioned slang. Then when they find what has happened to their emperor, we'll want to be miles and miles away from here."

"But the station operator at the hangars—"

"It's all set," Vic informed them. "I called them from station 15 and ordered the ship made ready. They think it's all right."

"Come on," urged Billy. "When we get there we'll take care of the operator the same as we did the first one."

"And to think the Masked Emperor turned out to be old Belmont himself," muttered Dr. Olsen unbelievingly.

"I never trusted him," replied his daughter. "But I should never have suspected him of that. No wonder he didn't want Kramer to return to Urania."

The End of Urania

IT was not long before the car came to a halt at the airdrome. The door flew open. Vic Leonard and Billy Carveth stepped into the operating room. An instant later two operators lay quietly upon the floor, Greta and her father were being hurried aboard the airship that stood in readiness, while Billy was throwing the great doors of the hangar open by the automatic control.

Quickly he worked the control board before him. A minute later the robots had wheeled the trim machine out on the flying field.

Breaking the connection, Billy descended to the ground level and sped across the flying field in the service car. But as he stepped aboard the airship, a curious humming sound came distinctly from the sunset sky.

"Look!"

Where Billy pointed they all turned their eyes. One, two, three, four, five, ten, fifteen—twenty-five trim airplanes were swiftly approaching from the north.

"The International Hawks!" shouted Vic emerging from the cabin of the airship followed by the others. "Hurray!" he cried and there was a breath of relief from the entire party.

Twenty planes circled over the city while five swooped to a graceful landing beside the Uranian airship. From the cabin of the first stepped two flyers.

For a moment Greta Olsen and her father stood aghast.

"Blake—Anderson!" Doctor Olsen's voice was tremulous. "But I thought—"

"We got through, sir," replied Blake quickly.

"But the Masked Emperor—I mean Belmont, said your bodies had been found in the jungle."

A wry smile crossed the pilot's face.

"So it *was* Belmont, was it?" he asked without a trace of surprise. "We thought so. You see, the man who killed Kramer squealed when he found that he was likely to spend the rest of his life in a psychopathic ward. But where's Belmont now?"

"Belmont's dead," replied Billy briefly. "Caught in a mine cave-in."

Then he turned to Greta.

"But why was it he didn't harm you or your father after Billy and I were put into the mine?"

"Because father was too valuable to him," replied the girl. "And I—well—I think he planned to someday have me for himself."

A sudden cry from the others turned their attention back toward the city. A curious green haze seemed to envelope the centrally located buildings.

"The radium has broken through the generating chamber," cried Vic. "Quick! We must get out of here!"

Instantly they boarded the Patrol planes—Dr. Olsen and Billy in the first; Greta and Vic in the second, for they would not be parted again.

Abandoned now, the great Uranian liner stood in the center of the flying field where they had left it, while the five Patrol planes mounted quickly to join their circling comrades.

"Safe!" cried Dr. Olsen as Urania dropped swiftly beneath them.

"Look back!" cried Billy with a sweep of his arm toward the city.

The great tower that had been the chambers of the Masked Emperor was enveloped now in the greenish haze, that seemed to be spreading upward and outward. And as they watched, its lofty height crumpled on its foundations and a moment later fell, flung far from its base by the momentum of the fall. The very earth was buckling under the majestic city.

"The last of Urania," murmured Greta softly as she clung closely to Vic watching the spectacle.

"Yes," replied Vic. "I wonder why they didn't use their motor disabling ray on the Patrol planes. But I remember now your father was going to take care of that. I wonder what he did to them? And I wonder why Belmont didn't carry a pocket radium gun?"

"I can't tell you what father did to the engine disabling system," replied the girl. "But Belmont never carried a gun in the city because he felt too secure. His power was feared too greatly by his people."

"And it helped to bring about his downfall. If he had been armed and prepared to use one when he came into that mine, we should never have gotten out alive."

"But the radium?" queried the girl. "How did it get loose?"

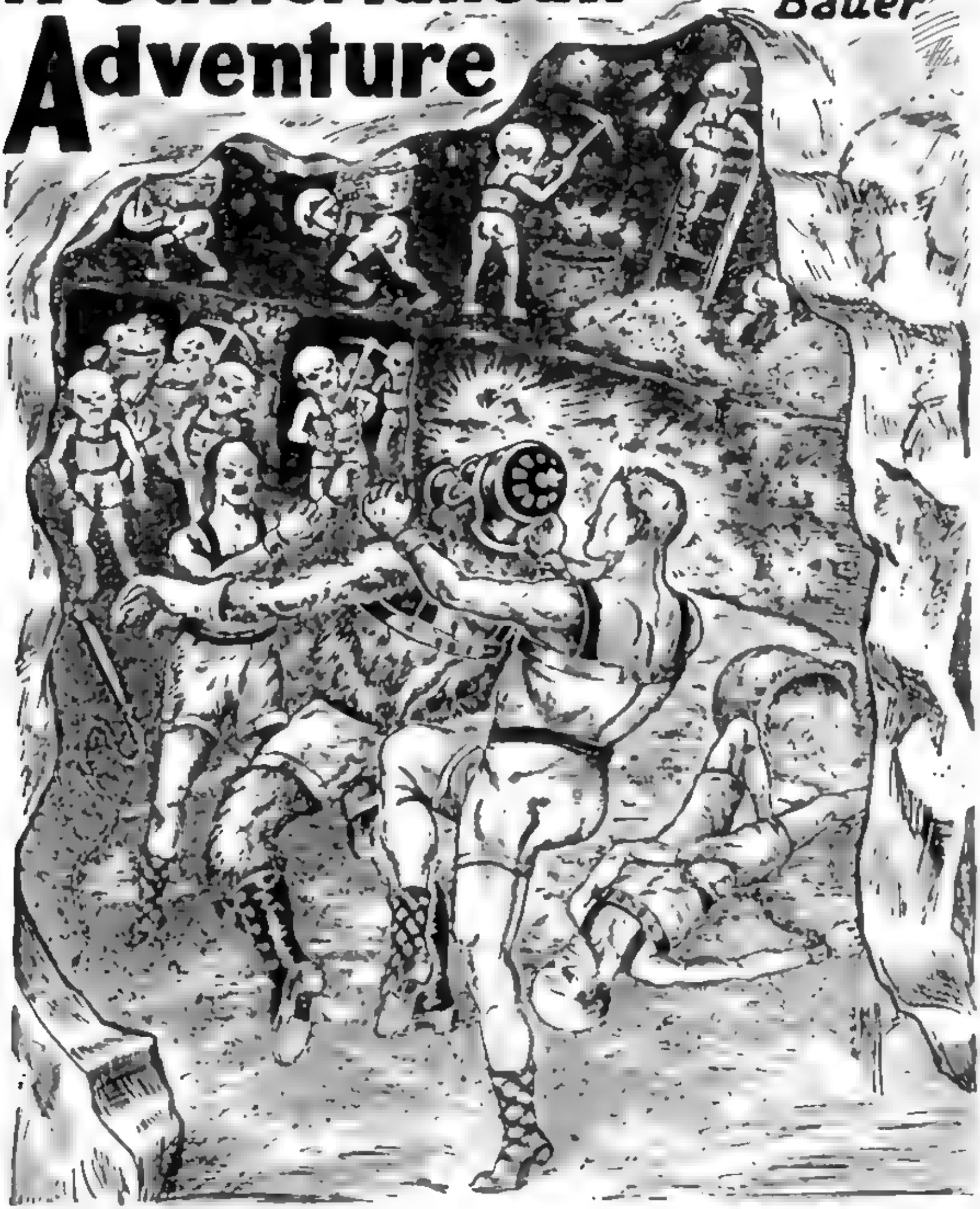
"There was a weak place in the wall of the generating chamber. The cave-in and crash of the elevator must have opened that weakened wall. The energy freed found its way about the tunnels and up the elevator shafts."

As they looked once more upon the doomed city their eyes met a never to be forgotten sight.

(*Continued on page* 271)

A Subterranean Adventure

By George Paul Bauer



(Illustration by Muller)

Like lightning Teddy's long arms shot over the head of the gorilla man and his right knee was rammed into the man's back.

A SUBTERRANEAN ADVENTURE

What Has Gone Before

Several young men driving along a mountain road near Denver, Colorado, come upon a strangely dressed man lying unconscious on the road. They take him to a hospital and on his recovery he tells the story of his disaster. He is an inventor, named Ned Gothram, and together with his nephew Ted Cranston, attempted to bore a tunnel clear through the earth with a machine they called the Penetrator. After going down a number of miles the machine took a sharp fall and landed into a great sea of oil which formed part of a gigantic subterranean cavern. They reach the shore and finally find a great city in a valley below them. They are attacked by winged human-like creatures and taken to the city where they are brought before the governor called Taman the Thrice Wise. By means of a Sonar, an instrument put on their heads, they are able to converse telepathically. Taman tells them that they can never return to the surface world. They are taken to a house of confinement. On the way they pass a beautiful young woman whom Teddy falls in love with. The mysterious girl comes to visit them but a winged man tries to force her to leave. Teddy vanquishes him and he leaves after making a threat against Teddy. The girl reveals herself as Noama, granddaughter of Taman, and the man as Sarro, Minister of Police, whom she has refused to marry.

After Noama leaves, by a recording device the men learn the history of the Raanians; how in order to avoid a catastrophe on the earth's surface, millenniums ago, the people dug their caverns and took up their residence sixty miles within the earth's interior. As they are looking at the history records, they are seized by Sarro and his men and taken to the madhouse where they witness the tortures of criminals. When the men of Sarro come to take them to the torture bench, they manage to escape and, obtaining flying belts, fly to the gate that might lead to the shaft to the surface. Sarro pursues them, there is a battle and they are recaptured. At a trial before the governor, Noama's grandfather, they are condemned to death. But the ship that is to take them to the place of death is attacked by Noama's friends and they are rescued and taken to the very house of Taman, the governor, where Noama secretes them. They again have a chance to see the Primarian history and witness the catastrophe that had driven the Raanian's underground. and witness the catastrophe that had driven the Raanians underground. Noama fills in some of the gaps of the history and is telling the men how the earth became liquid again after the catastrophe. A little corps of men and women were chosen to reestablish the race on the surface, the others to stay underground

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CHAPTER XVIII

A Dangerous Venture

THERE was a silence after Noama had finished.

"So those people who went to the surface are our ancestors?" Teddy asked.

Noama nodded her head. "Yes. But as time went on and we observed how they had changed, how they warred and killed each other, we decided they had become an alien race, and we wanted nothing to do with them. And then it was that the supreme council of Raa sealed the doors of the two communicating shafts forever, and passed a law that, whoever should henceforth attempt to open either and pass to the surface, would be punished with instant death."

Noama ceased, and rose from her seat. She smiled at Teddy.

"I must leave you now, because I must dress for worship in the temple. I am the high priestess of Raa, you see; like my mother was before me."

"You — a priestess?" Teddy said incredulously. "Then you people *do* have a religion?"

"Naturally we have a religion, Tedde-e da-a-r-ling. Why are you so astonished? Do not your people too worship the Supreme Creator of all the universes?"

She raised her superb arms and spread her hands over us.

"May the Great Spirit be with you, and guide you!" she intoned solemnly.

GEORGE PAUL BAUER

IN this issue, this stupendous story comes to its dramatic climax. Our two explorers from the surface are at grips with their captors; and we see through these pages the tremendous adventures that come when two men and a girl try to pit their strength against a powerful and hostile nation.

As we stated in a previous issue, the awfulness of the experiences that our explorers from the surface are forced to go through are almost unbelievable. But with the clarity of our author's writing and his vividness in describing the scenes of that far underground world, they become real and convincing.

The note of tragedy at the end our author cannot help. But he does offer some hope. Perhaps, as Mr. Bauer intimates, a new expedition can be sent to the underground world, and in a sequel we can follow again the adventures of Ned Gothram, Teddy and Noama, who have made such an impression on our readers.

Involuntarily Teddy and I had bowed our heads reverently. And when we looked up again, Noama, the wonderful high priestess of Raa, had disappeared.

"I'm tired to death of being cooped up here, Uncle Ned," Teddy turned to me complaining. "I didn't want to say anything to Noama, because it might hurt her feelings; but we've been here about ten days as far as I am able to judge without a watch, and I'm just wild to go somewhere outside and stretch my legs. I can slip out alone, so you needn't come."

"Nothing doing!" I objected emphatically. "If you're going, I am going with you. There's no telling what you might run up against, and I want to be there."

"Good old Uncle Ned!" Teddy approved heartily. "I knew you would. Thanks to Noama we know the language, and that, together with the skin coloring and the wigs ought to get us by easily. Besides, there's that festival beginning now, and the city is crowded with people. That ought to make it still easier for us to keep from being spotted by Sarro, or one of his cops."

"We'll risk it anyway." I decided. "For, to tell the truth, I'm just as eager to get out and stretch my legs as you are. Let's get busy with the camouflage."

The result of our make-up was quite astonishing. Our skin was now as startlingly white as that of any Raanian, and the skilfully stuffed wigs which Noama had pro-

vided caused our heads to appear of native size. We had also been compelled to color our lips and cheeks.

"By Jonah; you look so much like a Raanian that I am half ashamed to talk to you in English," I told Teddy laughingly. "If our mutual friend, Sarro recognizes you in that rig, he must be a mind reader."

The problem of how to get out of the palace unobserved now confronted us. Clearly we could not risk the elevator, by means of which discovery by one of the household would be inevitable, and there were no stairs. It was likewise obvious that if our presence in the palace was once known, it would immediately cease to be a haven of refuge, and would become a death trap instead.

"I am going to scout around out in the hall, and see what I can find out," Teddy announced, pushing back the heavy inner latch of the door.

A time later he returned, lugging a large bundle of heavy cord, similar to that of which the carrying nets were made, and a bunch of cloth.

"Found it among a lot of old junk in one of the other apartments," he explained triumphantly, "I can twist a rope out of the cord, and we can hang it out of one of the windows and slide down to the ground. We can wrap some of this cloth around our hands to protect them."

"That scheme for getting down might be all right, provided nobody catches us at it in this everlasting daylight," I said skeptically. "But how, in the name of Jonah, are we going to get back up? I doubt if we can make it climbing. The pyramid must be every bit of five hundred feet high."

But with the optimism of youth, Teddy was ready for me.

"All we have to do, is to borrow a set of wings each when no one is looking, and fly back," he suggested grinning.

Try as I would, I could invent no better scheme, and was compelled to adopt his. At the end of two or three hours Teddy had his rope finished, and we were ready for our adventure. Teddy's estimate of the height of the building had been correct, for when we hung the rope out of one of the bedroom windows, it lacked only a couple of feet in touching the ground. Upon my suggestion we arranged an equal length of cord in such manner that by pulling on it from the ground, we could open the knot in the rope and allow it to drop to the ground; thus eliminating the chance of its being seen.

Teddy slid down first, and both of us reached the ground without mishap or discovery. There was, of course, the chance that we had been observed from one of the neighboring buildings, or by some flyer; but we had to risk that.

As soon as we had landed in the garden and had succeeded in dropping the rope, we hastened into the dense, nearby shrubbery, and after concealing it quickly made our way to the adjoining avenue. Feeling quite secure in our disguise, we mingled inconspicuously with the thousands of pedestrians who crowded the great thoroughfare from end to end, and allowed ourselves to be carried slowly along by the stream of laughing and talking humanity, that seemed to flow into one general direction.

We soon discovered the reason: A vast square appeared, and it was into this spot that the multitude of people, streaming from a dozen or more avenues, converged like rivers into an ocean. A double row of magnificent trees, covered with huge, fragrant flowers of many colors, lined the immense area, and through this we passed with the crowd.

"Great Jupiter!—what a whale of a bell!" Teddy exclaimed below his breath, pointing with his eyes. "I'll bet a dozen new socks it's the one we've been hearing and wondering about."

It was "a whale of a bell" that loomed before us near the opposite side of the square. I have seen the largest bell in our own world, the one at Moscow, Russia, which weighs around 180 tons; but even that was as the egg of a pigeon to that of an ostrich compared to the gigantic bell of Raa.

Imagine, if you can, a perfectly circular block of masonry, fifty feet high and three times that in diameter, and on this, placed upside down, the frustum of an immense cone of metal with slightly concave sides, rising from the top of the base to the height of about two hundred and fifty feet, and two hundred from lip to lip, flanked at two exactly opposite points by slender twin towers which rose beside it. A heavy metal shaft connected each pair of towers at their upper extremity, and from the exact middle of this movable shaft a long metal rod rose upwards, which terminated in a huge ball. A massive counterweight maintained this bell hammer in an exactly upright position when not in use. Words fail me to adequately describe the massiveness and the vastness of that cyclopean bell—if such it could be called.

The Ceremony

BY pushing and wriggling through the dense crowd of people, Teddy and I finally contrived to work ourselves closer to the base of the great bell, and now another object claimed our attention: In the very shadow of the massive bell base a large altar of rose-colored stone had been built in the form of a horizontal triangle, with the apex pointing outwards, to the platform of which twelve wide steps led from all three sides. Many beautiful flowers, in magnificently sculptured containers of polished stone, adorned the platform and the altar itself, which latter was merely a massive, low column of white, semi-transparent stone.

But it was the object which crowned the flat capital of the altar column that drew the attention like a magnet—a great hollow globe of crystal, filled with a peculiar bluish, but perfectly transparent, liquid or gas Within the upper part of this globe a brilliantly luminous body of round form had been suspended in some invisible, magic manner; and about this bright source of light, in a horizontal plane just below it, floated thirteen lesser round bodies, of various sizes, and of differing degrees of luminosity, a number of them in turn surrounded by still smaller globules.

However, neither the thirteen larger bodies, nor their tiny satellites were at rest. Instead, the latter traveled about their parent globes at considerable speed, while these again moved in concentric, never-ceasing circular

paths about the brilliant central body.

The arrangement was, of course, perfectly understandable. It was a most wonderful, working model of the solar system as it had been before the great cataclysm. And by watching closely we were able to identify our earth, as it had been, with its two original moons, swinging about an orbit in the fifth place from the sun. This meant that two of the original five inner planets had been completely annihilated during the cataclysm.

"If we had that arrangement back home, we could make a fortune by exhibiting it," Teddy whispered to me.

"Yes, I think we could," I agreed. "And the more I see of this people's science, the less I am inclined to be proud of our own achievements."

At this moment an expectant murmuring, like the first blast of a storm, rose about us. "They are coming! they are coming!" we heard the people exclaim on all sides of us.

With great interest we followed the gaze of the multitude to the blue haze above us, and saw one of the great airships spiralling down. Larger than any we had yet seen, more gracefully built, and of a shining white color, it had the stamp of royalty all over it.

No sooner had it landed in a clear space a hundred feet or more distant from the altar, when a narrow, vertical section of its body opened downward and formed a comfortable stairway, down which Taman, the governor, with exquisite courtesy conducted his granddaughter, Noama, high priestess of Raa.

At sight of Noama, I heard Teddy gasp in admiration.

And no wonder. For in her long, flowing, diaphanous robes of priesthood, which revealed more than concealed the magnificent contours of her body, her beauty was almost overwhelming. A triple triangle on the breast of the robe flashed a thousand colors with each undulation of her perfectly formed bosom, and a delicately fashioned crown of jewels, topped by a self-luminous, miniature sun, made a fitting adornment for her queenly head.

A line of six of his principal counsellors followed Taman, and Noama was followed by six beautiful sub-priestesses. Arrayed in splendid robes of state, and the great dome of his head covered by a jeweled, pyramidal hat of twelve sides, the Thrice-Wise ruler of Raa made a most fitting consort for the wondrously beautiful high priestess. These two principals, with their likewise splendidly robed followers, made a most imposing ceremonious train.

As the procession ascended the twelve broad steps of the altar, the six counsellors of Taman and the six sub-priestesses stopped when the top step was reached, and, parting from each other, they arranged themselves so that upon each of the six upper steps on Taman's side stood one counsellor, and upon Noama's side one of the young sub-priestesses, each of the twelve half turned and facing the altar platform.

At the same time Taman led Noama to the left side of the altar column, while he occupied the right. He raised his hand, and immediate silence ensued. And in that moment the immense bell back of the altar awoke to life. Fascinated, I watched as the two great hammers from the twin towers swung against the colossal rim alternately, striking it twelve times. The huge balls of the bell hammers—they were of a hard wood—merely tapped the bell, but the tonal effect was indescribably, awfully grand—a deep, mellow roar which appeared to come from the center of the earth.

As long as the voice of the great bell vibrated through the atmosphere, everybody stood at silent, reverent attention. But as soon as its ultimate tone had whispered into silence, Taman began to speak. In a deep, earnest, and sonorous voice he briefly reviewed the life of their ancient ancestors, the Primarians, the details of which each child in Raa knew, praised the great wisdom of the Primarian wise men, who through their wonderful knowledge of the forces of nature had been enabled to create this subterranean empire, and gave thanks to their memory.

When the governor had ceased, the great bell again sounded twelve solemn strokes, one for each member of the Primarian grand council.

Noama now walked forward to the very apex of the altar platform, and raised her perfect arms and beautiful face upwards in a gesture of adoration.

"Praise be to the Eternal Creator of the Universes!" she chanted in her marvelous contralto voice. "Praise be to him forever!"

"Praise be to him forever!" the six sub-priestesses answered her.

"Praise be to him forever!" all the people answered in unison. And at the same time a grand chord of music sounded from far above, where a host of flying musicians circled, a sound as of great trumpets, but of much softer timbre.

Three times this ceremony was repeated. And then Teddy and I were treated to a vocal performance which held us spell-bound to the very last note. Noama and her six acolytes sang a prayer—a septette—compared to which the finest operatic rendition I had ever heard in our own world would have sounded like the merest toneless croaking.

But at the end of the song I came back to reality just in time to grasp my nephew forcibly by the arm, and prevent him from bursting into an orgy of violent, enthusiastic handclapping. For a moment or two he stared at me absentmindedly. Then he began to chuckle silently.

"Great Jupiter! I almost did it that time, didn't I, Uncle Ned?" he whispered. "But did you ever dream that such marvelous singing was possible?"

Detected!

I WAS just about to answer him, when suddenly a shock of apprehension went through me. Not more than about thirty or forty feet away, near the bottom step of the altar, stood that arch fiend Sarro, and his big black eyes stared at me malignantly!

In an instant I realized that he knew me, and almost simultaneously I knew why. My extraordinary height had given me away! Fools that we had been not to have thought of that.

"Let's get away from here as fast as we can, Teddy," I said through the side of my mouth. "Sarro is stand-

ing near the altar, and he has spotted us."

Noama and the six sub-priestesses had just begun a wonderful dance upon the steps of the altar, and the attention of the people was fixed upon them. As quickly as possible without giving offence, we began to edge our way through the crowd, I walking with bent knees so as to diminish my height as much as possible, and to keep Sarro or his men from seeing me over the heads of the people.

We reached the outer edge of the crowd at last. But before we stepped clear, we reconnoitered the broad avenue before us carefully. Everything seemed clear. Quickly we slipped to the avenue, and started to hurry away in the general direction of the governor's palace.

But we had not taken a dozen steps, when from behind an immense tree Sarro and two of his lieutenants stepped into our path. All three of them were armed with Kras, and things looked bad for us. The sombre face of the police chief was twisted by a sardonic smile.

"So, my evasive friends, you thought you could evade me again, did you not? Fools that you are! Well, I shall take good care that you do not escape again."

Grimly and menacing the three men crept slowly toward us, holding their weapons ready for instant action. Unarmed as Teddy and I were we seemed to be as good as captured.

"Watch! I'm going to bluff them," Teddy murmured quickly.

He stopped the advance of the trio with a motion of his hand, and returned Sarro's malignant gaze with a cool one of his own.

"You may be the all-powerful minister of police or not," he said quietly in Raanian, "but if you do not instantly stand aside and let us pass, our two friends in the tree above you will drop their charged Kras on top of you."

No doubt the ancient American bluff was entirely new to the Raanians, for they swallowed it in its entirety. Involuntarily the three of them glanced upwards and recoiled. But that momentary shifting of attention was their undoing. The next instant Teddy had hurled himself headlong at Sarro's legs, and tripped him with an irresistible football tackle.

Taken completely by surprise, the big Raanian police chief tumbled against his nearest lieutenant with considerable force, and both of them crashed heavily to the ground. Simultaneously the charged Kra slipped out of Sarro's hand, touched his subordinate's neck, and killed him. In another instant Teddy had caught Sarro in a deadly wrestling hold.

Meanwhile I was not at all idle. For even as Teddy's body hurled through the air at Sarro, I leaped forward at the third member of his party, a huge, burly ruffian. With my left hand I managed to grip the wrist of his right, which held the Kra, while my right arm curled about his heavy neck, crushing his face against my chest. But, as I said, he was a husky customer and struggled mightily, so that I had to exert all my strength against him.

The object of both of us was, of course, the Kra. With a quick leg twist I brought him to a fall in such a way that his right hand struck the ground first, breaking the wrist and dislodging the weapon. With a hard blow against his temple I rendered him unconscious, caught up the Kra, and sprang to my feet.

It had all been a matter of seconds. But to my dismay I immediately realized that even that short time had sufficed to turn the tide of battle against Teddy. I had never doubted the fact that Sarro was possessed of great strength; but now I was forced to the conclusion that in a wrestling bout he was unquestionably Teddy's master. In some way the big Raanian had shaken off my nephew's hold, and had substituted one of his own which could result in only one thing—the breaking of Teddy's neck.

But I saw something more: About a score of Sarro's men were rushing towards us along the avenue. I hesitated only the merest instant, however. Then I leaped forward, and, using the discharged Kra as a club, brought it down on Sarro's head with all my strength. The next moment I had dragged Teddy to his feet, and ran down the avenue in the opposite direction, impelling him along. He was considerably dazed, of course, but picked up quickly, running strongly after a few yards.

A glance over my shoulder showed me not only that our pursuers were gaining on us, but that they had been joined in the chase by a new element—flyers. The partly open portal of a huge white pyramidal building in a garden immediately ahead of us caught my eyes.

"Quick, Teddy—in here!" I cried, and in another moment we were leaping up the few steps to the portal. An angry, menacing roar went up behind us. Then we were in the dim interior, and had slammed shut the massive metal door. Breathing heavily, we stared at each other, and then broke into a simultaneous giggle.

"We — got — what we — were after—excitement—didn't we?" I panted.

"I'll say—we did!" Teddy chuckled. "And now we—"

I grasped him by the arm and drew him towards the more brightly lighted interior beyond the dim entrance passage. "Come on—we've got to find a hiding place, or a back entrance," I whispered grimly. "Those cops out there won't let a closed door stop them."

And even as we crept quickly away from the great portal, we heard the muffled clamor of our pursuers on the outside.

CHAPTER XIX

A Sudden Inspiration

A DEEP silence surrounded us. It seemed almost a tangible thing, this silence, an invisible wall of mystery, a void that yet appeared filled with nameless whisperings and rustlings—

We passed under an arcade of slender columns, and emerged into a vast, square chamber, which immediately reminded me of the great laboratory in the temple of wisdom. The arcade ran completely around three walls of the immense room, and partly around the fourth, opposite to where we had entered.

An artistically wrought balustrade formed a sort of continuous balcony on top of the arcade, and behind this balustrade we glimpsed a row of mysterious cones, each of them standing upside down, and ranging in size from the towering height of twenty feet, to the

diminutiveness of a wine glass.

But almost immediately our attention was drawn to an object directly opposite to the entrance, in the middle of the far wall.

A semi-circle formed of steps of milk-white stone led to a platform of the same shape and material, at the rear of which rose an immense block of rose-colored, polished stone. On its top were flowers in exquisitely fashioned vases of crystal and of glittering, reddish-yellow metal.

The altar—it could not be mistaken for anything else—was shaped like the half of a cyclopean millstone, its extreme outer curve adorned by a triplet of triangles, one within the other, formed of precious gems. Hieroglyphics formed of thousands of tiny gems, a marvel of jeweler's art, occupied the space within the inner triangle.

With a sudden flash of inspiration I leaped up the altar steps, ran to the back of the altar, and leaned far over towards the middle of it, feeling back of the flower vases with my outstretched hand. My fingers came in contact with the edge of an opening in the stone. The next moment, to Teddy's evident astonishment, I had swung myself up on the altar, and stepped carefully among the flower vases.

"Quick, Teddy—I've found the right place!" I called triumphantly.

It was an oval opening, hidden behind the flowers, and the luminosity of the room shone into the recess beneath, showing a hollow space within the altar.

"But how, in Jupiter, did you guess that the altar would be hollow?" Teddy whispered in amazement, when we had scrambled into the cavity, making sure that the floral decorations camouflaged its opening perfectly.

"I don't exactly know," I whispered back. "Maybe it is because somewhere, or some time in the past I have read about hollow altars in the ancient Egyptian or Assyrian temples. I've forgotten. Anyway, this might turn out to be a trap instead of a hiding place. We'll soon see."

Grimly I grasped the Kra that I had brought along. I didn't of course know whether the weapon was in working order or not, after the blow I had given Sarro with it, but the feel of it in my hand made me more confident. Not daring to speak even in whispers, we waited silently. The pile of dead, dry flowers within the hollow made us fairly good seats, so that we did not suffer the discomfort of the bare, cold stone.

Slowly, interminably the minutes dragged on and on and on. A stillness as of a tomb brooded over the temple, pregnant somehow with menace and heavy with the tenseness of lurking danger and death. And too with each moment the atmosphere within the altar became more and more oppressive, and soon sweat was running down my body and face in great globules, splashing onto my hands. I wondered whether Teddy felt like I did, but dared not speak. The merest whisper in that tense stillness would have sounded like the loud hissing of a great snake, and would have penetrated to every corner of the vast place. And perhaps even now our relentless enemies might be creeping towards our hiding place—

I set my jaws desperately, and gripped the Kra until my fingers cracked.

The Stream of the Dead!

A SUDDEN sound somewhere in the temple struck against my taut nerves like an electric shock; and a rustling noise nearby advised me that Teddy too was on the alert. Presently the murmur of voices became audible, coming gradually nearer, and I could distinguish them soon as that of a man and of a woman.

The two voices advanced to where I judged the bottom of the altar steps to be and stopped there. And now, with suddenly intensely sharpened interest, I recognized them. The male voice was that of our arch enemy, Sarro; there was no mistaking its harsh, domineering quality; and that flute-like, musical feminine voice could belong to one woman only—Noama.

Noama was the high priestess of Raa, and this was her temple! It was strange that neither Teddy nor I had thought of that possibility.

"But I tell you that my men saw the two of them come into the temple," Sarro was arguing angrily. "And I insist that you permit me to search for them!"

"And I tell you that it would be profaning the temple!" Noama's cool voice answered. "As high priestess I shall never permit such profanation! Besides, common reason would tell you that there is no place within the temple where anyone could possibly hide."

"Very well," Sarro said angrily. "I shall go to the supreme council for permission to search the temple. And in the mean time my men shall keep the place surrounded. I might as well tell you, Noama, that I do not at all trust you where those two men are concerned! And as far as their escape from the prison ship goes—I have always had a suspicion that—"

"Be very careful what you say, Sarro!" Noama's voice, cold and sharp like an icicle now, interrupted him. "Remember that Taman, the governor, is my grandfather. And now—the quicker you leave the temple the better."

For several moments there was no sound, and I could visualize the arrogant minister of police, and the haughty high priestess facing each other aggressively at the steps of the altar. Then came the rapid, resentful clatter of Sarro's footsteps across the tesselated floor—the booming slam of the great portal—and then once more silence brooded heavily over the great temple.

Presently I could sense rather than hear light footsteps ascending the altar steps. And then, softly like the whispering of a spring zephyr through the leaves of a tree, came Noama's voice.

"Tedde-e! Tedde-e!" she breathed.

There was a quick rustling of dried flowers near me, and then by the light falling down through the oval opening I could see Teddy's figure loom up, closing the opening solidly. A low, barely perceptible murmuring came to me as the two lovers exchanged a few rapid words. And then my nephew joined me again.

"Watch out, Uncle Ned! She's going to drop us," he warned.

And then, even before I could ask him what he meant,

the bottom of the altar suddenly dropped away from under us, and together with the dried flowers we were precipitated into the black, unknown depths beneath.

Splash! Splash!

Like two heavy sacks of meal Teddy and I plunged into an invisible stream of ill-smelling water. Immediately its swift current gripped us as with a thousand clutching, greedy fingers, endeavoring to drag us to destruction into its black, swirling depths. Instinctively I levelled my body into swimming position, and stretched my hands in front of me, allowing the water to hurl me forward in the impenetrable darkness.

"Teddy—Teddy—are you all right?" I called anxiously.

"Right as rain—right side up—and all together," he sang out cheerfully through the swishing and gurgling of the rushing water. "But, oh! what a stink! I got some of that stuff into my mouth when we fell in, and I've been spitting ever since."

"So have I tasted some of it," I admitted ruefully, swimming along close beside him. "It has what is known as 'a dark-brown taste' and there isn't a doubt in my mind now as to where we are. This is the sewer of Raa."

"I know it is," he said. "Noama told me. But it was the only way out of Sarro's clutches. She was very sorry that we slipped away from the palace; it upset all her plans. But she's a wonderful sport, and told me what we are to do."

At this moment, somewhere ahead of us, a sudden flood of light shot down into the sewer as if a trap door had been opened, and a human body catapulted from above, landing with a splash in the foul flood. Then in a flash the light disappeared again, and once more the stygian gloom pressed down upon us like a suffocating pall.

An involuntary shudder passed through me. In that momentary glimpse I had perceived that the body was that of a woman, and also that it was completely nude. But it was not that which agitated me; it was something very peculiar about it—something nameless which I had not seen, but had rather felt, with that indescribable sixth sense which at times seems to act in us—that yet filled me with a strange and shuddering dread—

I wondered if Teddy knew.

Suddenly a feeling of horror clutched me. One of my groping hands had touched something icy and rigid—the rounded breast of a dead woman!

A swirl of the water caused the corpse to move under my touch, so that my hand slipped over to its neck. With a cry of horror I snatched my hand away as if it had been burned. I understood now my previous, instinctive feeling of dread—the dead body was headless!

Utterly nauseated I pushed the awful thing aside, and swam on as if all the furies of hades were pursuing me.

"Come on, Teddy, let's get out of this hell hole as fast as we can," I shouted back over my shoulder. And then when he had caught up with me I explained.

"I had an idea it might be something like that," he said. "It just goes to show that humanity is about the same everywhere. These Raanians don't seem to be above murder."

* * * * *

Far ahead of us a dim light appeared, becoming brighter every moment, and forming into a semi-circle of luminosity. It was the mouth of the sewer.

According to a prearranged plan, paralleling that of Noama, we waited until we were about a dozen yards from the opening, then we took a deep breath and dove almost to the bottom of the great stone pipe. Like out of a huge cannon we shot into the cold, clear waters of the great river beyond, and swam under the surface until I thought my lungs would burst from the pressure of my held breath.

Amidst the dense bushes of the opposite shore we waded cautiously to solid ground, and stopped under a great tree with thick, overhanging branches to reconnoitre. A sudden low exclamation of my nephew drew my attention to the mouth of the sewer we had just left: Circulating low above it, and evidently watching the opening with close attention, were two of Sarro's flying policemen!

"They might or might not be looking for us," I said reflectively. "But whatever their business is, it's clear they mustn't see us."

We watched the two flyers attentively, and presently saw them dive towards a certain spot near the middle of the river, some distance below the sewer, and circle around the place, flying only three or four feet above the surface.

"I'll bet a dozen new socks they've found your headless corpse," Teddy suggested with conviction. And with a reminiscent shudder I agreed with him.

The diverted attention of the policemen gave us our chance, however. Quickly we ducked from under the tree, and bent double dove across an open space of ground into a field of tall plants beyond. A couple of hundred yards at right angles from the river we came upon the path which Noama had mentioned to Teddy, and after following this for about ten or fifteen minutes we reached an open space within the tall, maize-like plants, in the middle of which stood a small, cone-shaped building.

"That must be the place where we are to wait until Noama sends us word," Teddy said. "I hope we'll find something to eat though. I'm hungry enough to chew the ears off a healthy lion."

We passed into the house then, and began our search for food. The ground floor of the little building was evidently a pumping plant, by means of which water was raised from the river to irrigate the field. But a narrow winding stairway of metal led to the upper floor, and I ascended it.

A simple cot, a small table, and one chair comprised the entire furniture of the small upper room, and there was a closed set of shelves against the wall, conforming to its curving. But near the shelves was a box-like affair of metal, set on four tubular legs, that immediately engaged my attention. I opened its door, and disclosed two shelves of thin, perforated metal, on each of which rested some flat pans holding as for our special provision a full meal of delicious foods.

Perhaps we ate too much, for after awhile both of us felt the need of sleep. Teddy insisted that I lie

upon the cot, while he stretched himself out on the floor on a pallet made of a bundle of bedding.

Teddy fell asleep almost at once, but I lay awake for some time. For some indefinable reason I felt vaguely uneasy. Finally I got up softly, and reconnoitered the surrounding field of tall plants from each of the four windows in turn. But not the least suspicious sign appeared anywhere.

Satisfied that everything was all right as far as our immediate safety was concerned, I returned to the cot, and before I realized it sleep claimed me for its own. Such a fool is a man with a full stomach. He ignorantly goes to sleep, and the trap is sprung.

CHAPTER XX

Nemesis Strikes Hard

I DREAMT that I was attacked by a pack of hungry wolves and, fighting fiercely for my life, came back to reality to find myself in the clutches of a half dozen of Sarro's men, who were holding me down to the cot by sheer numbers. Beyond them, on the floor, I saw another knot of struggling men, and knew that Teddy formed the center of it. But between us, directing the unequal battle with short, harsh commands, the dominating figure of Sarro himself loomed like a malignant demon prince from the realms of Satan.

"Fight your hardest, Teddy!" I shouted encouragingly, panting from my own exertions as I struck out vigorously with fists and feet.

"I'm doing it!" he shouted back, with the joy of battle in his voice.

But the odds against us were too great. In a couple of minutes we were overpowered, and a touch of a Kra fettered us with that strange catalepsy which is more powerful than a hundred chain manacles could be.

There was no prison ship to take us this time, however. Grim and malignant of face Sarro himself supervised the placing of both of us into carrying nets, and without delay our eight carriers rose directly to the upper air lanes with us. More than a score of armed men surrounded the carriers, and behind them came the cruel minister of police, flying slightly higher so as to have a clear view over the entire procession, I suppose. Sarro was evidently not taking any chances of our slipping out of his hands again.

How he had discovered our whereabouts within such a short time was a mystery to me. It was uncanny. The only satisfactory solution I could arrive at was that someone, probably from the air, had glimpsed us, and had reported us. I remembered the two flying police scouts about the sewer. It was just possible that one or both of them while scouting over the vicinity had seen us entering our refuge and thus we had been discovered.

At full speed we were carried on to our unknown destination, which however I guessed to be the mines where our term of punishment was to begin, as the supreme council had decided. I wondered what sort of mines they would be—

Hour after hour—mile after mile—on and on—with the rushing of the air in my ears, and the glare of the little suns in my eyes—

* * * * *

Long ago I had closed my eyes against the insufferable glare, and had sunk into a sort of stupor, from which I presently awakened to the realization that my head was several degrees lower than my feet and the rest of my body. Evidently we were descending. That, of course, meant that we were close to our destination. The low position of my head enabled me to see that we were rapidly approaching an immense vertical blackness ahead—

Then, without a jar, we had landed amidst a cluster of huge buildings. Immediately Teddy and I were carried in through a door of the nearest one, and entered what appeared a vast machine shop. The humming of swiftly running machinery, and the clattering of tools in the hands of hundreds of half-nude workmen was all about us.

At a few sharp commands from Sarro, a number of workmen—darker skinned and possessed of smaller heads than the Raanians—hurried up to us, and began quickly to manacle our arms and legs with lengths of strong chain, fastened to heavy wristlets and anklets of metal.

Only when this was accomplished to the entire satisfaction of the ominously watching minister of police, and we were rendered helpless, were we at last touched with a Loo and the cataleptic condition of our bodies removed.

"Get up!" Sarro commanded us harshly.

From somewhere the big Raanian had obtained a sort of whip—something between a heavy riding quirt and a bull whip—which he held in his right hand suggestively, while he watched us malevolently.

Both my nephew and I were naturally very sore and stiff of body from what we had gone through, and that, together with the unaccustomed encumbrance of the chain manacles on hands and feet caused us to be somewhat slow in complying with the order to rise from the floor.

But, instead of realizing this fact, our apparent deliberateness infuriated Sarro. With the speed of a striking cobra he lashed out with the heavy whip, and brutally struck Teddy across the back of the head several times in rapid succession.

"Move quickly when I command!—you worm of filth!" he roared angrily. "You who tried to outwit me, and who dared to lift your filthy hands against me, the minister of police. I shall teach you what it means to anger me!"

Teddy had gained his feet by now, and with the last words Sarro lashed him a number of times into the face with such viciousness that the skin was deeply cut in more than a dozen places, and the blood streamed down over his cheeks and dripped onto his breast belt. But in spite of the terrible punishment Teddy faced the brutal Raanian unflinchingly.

"I always thought you were a coward, Sarro," he said with utter contempt. "And this act of yours proves it!"

Condemned!

THIS defiance and denunciation before his score and half of subordinates, appeared to turn Sarro berserk. With a roar of fury he swung the cruel whip again and again, smiting my unfortunate nephew's face and body, so that the blood ran in streams.

The sight maddened me. With a bound I broke away from my two guards, and despite my chains flung myself at the brute and managed to clutch his throat, crashing to the floor with him.

"You devil, I am going to kill you for that!" I shouted, and exerted all my strength in the attempt.

But almost immediately some one struck me with something over the head from behind; and although the blow did not render me unconscious, on account of the disguising wig I still wore, yet it caused me to release my strangling grip, and instantly a dozen hands dragged me away from Sarro.

Gasping for breath he rose to his feet with the help of two of his subordinates, and glared at me murderously. He had dropped the whip, and now both of his hands nursed his aching throat.

"I shall pay you for this—a hundred times!" he croaked hoarsely. "Both of you shall suffer the tortures of the damned, tenfold."

The tortures of the damned! I remembered those dehumanized unfortunates of the crimson madhouse, and shuddered inwardly. Was that to be the ultimate fate of Teddy and me? A grim resolve took possession of me. Before I allowed that to happen—!

I heard Sarro give an order, to the effect that we were to be taken to the mine foreman and that we were to be put to work in the worst place in the mine. Then, between four guards, Teddy and I were hustled out of the machine shop into the open.

This part of the vast cavern, like the territory near the forbidden shaft portals, was dimly lighted; with the exception, however, of the plot of ground where the group of extensive mine buildings was situated, which one of the miniature suns illuminated with the brightness of day.

About two hundred yards away from the huge building whence we had emerged, loomed the immense wall of the cavern, rising to dim impenetable heights miles above us. Evidently this part of the wall was composed of a different kind of rock, for its color was almost of coal blackness.

We passed around one corner of a huge building and now perceived to our astonishment that the foot of the wall was pierced by the perfectly round openings of two tunnels, about one hundred feet apart. They were brilliantly illuminated inside, which, in that black rock, gave them the uncanny resemblance to two enormous, unwinking, and malevolently watching eyes.

A narrow and perfectly smooth stone roadway, with a deep groove in the exact middle of it, ran from each tunnel mouth to the great pyramidal building, each of them entering an open portal at opposite ends of the place.

But what excited our immediate, deep interest were the strange vehicles which at great speed shot out of one tunnel entrance and into the other in a never ceasing, endless procession—vehicles like immense, vertically moving cannon projectiles, each about thirty feet long, and traveling in almost absolute silence.

Without delay our guards hurried us into the building, and immediately the deep roar of great machines burst upon us. An immense wheel, one-half of which was visible above the ground at the far end of the vast hall, revolved and stopped and revolved again unceasingly, and as unceasingly spewed forth from the tube-like cells at its periphery as it stopped at the level of the floor, a never-ending stream of the peculiar cylindrical mine vehicles, some of which we had glimpsed outside. The tube-like conveyor cells in the great elevator wheel seemed each to move independently, probably by means of roller or ball bearings, because during the peripheral motion of the latter they maintained the vehicles they contained upon an even keel.

Most of the vehicles, upon emerging from the elevator wheel shot immediately past us, and continued at considerable initial speed to the outside, to be quickly swallowed up by the tunnel entrance beyond. But a number of them, probably in need of repair or inspection, were switched aside by horizontal conveyors towards the side of the building, where a long row of them stood, miraculously balanced upon their single row of bottom wheels, attended to by large numbers of half-clad, sad-faced mechanics, who were kept busy by bosses armed with the same sort of whips which Sarro had used on Teddy and me.

All together, if one excepted certain grim details, it was such a scene of intense activity which one might find in any of our American industrial establishments of a similar nature. But those strange torpedo-like conveyor vehicles—I was sure that somewhere I had seen their like—

To the Mine!

OUR party of six had stopped just within the wide main entrance portal, and now one of the guards moved a red-colored lever upon the wall nearby. Immediately, directly above the portal on the inner side, an intensely bright light of crimson color flashed into being. Evidently it was a signal; for the very next outgoing conveyor vehicle stopped opposite us, and I caught a glimpse of its single operator through one of the observation windows.

Along a series of shallow, built-in steps Teddy and I were forcibly hustled upwards to the top of the machine where we tumbled into a longitudinal opening, and fell heavily into the dim interior, bruising our already aching bodies against the considerably warm bottom of roughened metal.

But we had scarcely gained our feet, when the quick start of the vehicle tumbled us to the floor again, to the intense amusement of our guards, only two of whom had entered with us. This time, instead of trying to get up again, we decided to remain seated.

"The damnable brutes could at least have doctored you up before putting us to work." I said angrily, gazing compassionately into Teddy's bruised and bleeding face. "It's a shame that I didn't have time enough to finish that arch demon. I could have died gladly then with the satisfaction of having ridden the world of a human viper."

"My face feels like a lot of mincemeat," Teddy said, smiling painfully through bruised and bleeding lips. "But when I think about what I am going to do to Sarro if I ever get another chance, it makes me feel considerably better."

I had noticed that one of the two guards appeared to have a more friendly-looking face than the others I had seen, and decided to try my newly acquired Raanian on him.

"Say, brother—" I addressed him pleasantly, "do you know if there is any medicine in the mine so that my nephew's wounds can be attended to! Otherwise blood-poisoning is liable to set in, and he will not be able to work."

The guard addressed gazed at me quizzically for a long moment. Then he spread out the fingers of his left, unoccupied, hand with the palm downward in the Raanian gesture of negation, and smiled a trifle mockingly.

"Even if there were medicine, what good would it do? Haven't you heard that you are to work in the worst part of the mine?"

"Yes, I heard Sarro give that order," I admitted. "But what has that to do with healing my nephew's wounds?"

The pleasant-faced guard glanced at his companion, and both of them laughed amusedly.

"I will tell you," the former said finally. "Traz, the head boss of that part of the mine, is going to attend to you personally, according to Sarro's orders, and Traz takes more pleasure in using the whip on his convicts than in eating! Now do you understand?"

CHAPTER XXI

The Gorilla Men

FOR perhaps ten minutes or so we watched through the wide longitudinal opening in the top of the ore conveyor, the whizzing by at high speed of the brightly illuminated ceiling of the tunnel. Then, without the least grinding noise, the vehicle came to a smooth stop, and the guards hurried us to get out.

We were in an immense circular chamber hewn into the natural rock, whence many secondary tunnels radiated in fan-like formation. A set of ever-changing colored lights depending from a framework in the center of the ceiling evidently directed the constant stream of entering and departing vehicles, and everything worked like clockwork.

There was not the least fuss or hurry, or shouting of orders as I had seen in some of our largest mines on the surface. Indeed, the absence of noise in view of the constant and high speed traffic was uncanny. And it was also with particular interest that I noted that although in the tunnels the almost invisible, covered wheels of the ore conveyors moved along continuous V-shaped grooves, they were steered across the perfectly smooth and hard floor of the great terminal to their various destinations without any mechanical guides, and thus all time-wasting switching was eliminated.

But we had only a mere glimpse of all this; for almost immediately we had to scramble aboard another conveyor, exactly like the previous one, which without delay hurled itself into the maw of one of the inner tunnels, and we were on our way again, traveling with even greater speed than before.

Like white-hot cannon balls the lights of the tunnel flashed by us overhead. The two guards leaned against the dividing wall between the ore tank where we were and the control compartment beyond, and carried on a low voiced and apparently desultory conversation, often laughing, and then again looking grimly in our direction.

"It seems to be just our luck to spoil all of Noama's plans in our behalf," Teddy said sadly, after a long silence. "And it's all my own fault too. If I hadn't been so impatient to get away from Taman's palace—"

"No you don't!" I interrupted him emphatically. "It's just as much my fault as yours. Anyway, I credit Noama with enough common sense to understand the situation."

He threw me a warm and grateful glance.

"You're right, Uncle Ned. She's the wisest and most marvelous girl I ever knew," he said with earnest enthusiasm. "If we ever do get the chance to return to the surface and she comes with us as we have planned, she'll make me the most wonderful wife in the world."

"And I'll say 'Amen' to that." I agreed earnestly.

The speed of the conveyor slackened, and presently it drew to a smooth stop beneath a wide-mouthed ore chute. We had barely time to scramble out of it, when the extensive metallic lip of the chute automatically lowered itself, made contact with the opening on top of the car, and a thick stream of dark-colored ore shot out of it into the capacious belly of the conveyor.

But our guards did not give us any time to watch the loading. They hustled us quickly into an opening in the tunnel wall which proved to be an elevator entrance, and with a clanking of chains we took our places in the spacious elevator. The pleasant-faced guard shifted a lever on the wall of the cage, and we rose upwards with considerable velocity. There was a circle of twelve crystalline indicator bulbs a couple of feet above the control lever, and as we ascended, one after another of them burst into radiance, two white ones and one of red color alternating. Evidently we rose to the very top of the elevator shaft, for when we stopped all twelve bulbs were lighted. From the maintained speed of the elevator I calculated that we had ascended to a height equivalent to about five hundred feet.

A door in the wall parted before us, its two wings sliding noiselessly out of the way at either side, and we stepped into a brightly illuminated room some twenty feet square hewn into the living rock.

A large rectangular table of metal occupied the middle of the chamber, flanked by two long benches of the same material, and on these a half-dozen men were seated. They were dressed in peculiar, coverall-like suits of white cloth, and were occupied with eating out of large stone bowls what appeared to be a coarse meat stew, augmented by great chunks of Raanian bread. I said "eating" but feeding would be a more appropriate term; because their table manners were those of swine.

But it was upon the faces of the men that my attention centered immediately—faces of cave men—not

only utterly brutish, but expressing in every lineament an appalling viciousness and mercilessness, and one sought in vain for a spark of humaneness in their cold, stony eyes.

As a type they were different from the average Raanian as an Australian bushman is from the average white settler, and it seemed incredible that there should be such people among the descendants of a very highly civilized and advanced race like the Primarians had been. But I reflected that there have always existed degenerate types, and that undoubtedly the men before us were of that kind.

Our pleasant-faced guard approached the largest one of the men, a veritable gorilla, saluted him in the Raanian manner of extending both hands palm upward, and addressed him pleasantly, the way a white man would speak to a chief of savages.

"Traz, these are the two foreign prisoners," he announced. "No doubt you have already been notified regarding them, and that they are quite rebellious."

The Place of Dread

A FRIGHTFUL, utterly repulsive grimace, which was evidently meant for a smile, distorted the visage of the gorilla man, and he made a sign of assent.

"Yes," he rumbled deep down in his vast, barrel-like chest, meanwhile observing Teddy and me with his cold, stony eyes. "They shall be most tenderly cared for!"

His thick, blunt fingers caressingly fondled the handle of the heavy whip which hung from his right wrist, and the deadly menace in his tone chilled me to the bone. I remembered what our pleasant-faced guard had said about Traz' fondness for using the whip, and, observing the brutishness of the gorilla man, I could well believe it.

But evidently his utterances struck some chord of abysmal humor in his five subordinate foremen at the table, for they broke into uproarious, coarse laughter, the harsh quality of which grated most painfully against my taut nerves.

"This seems like a very pleasant prospect." I murmured to Teddy.

But low as I had spoken, Traz had heard it.

"Silence!—you worm!" he growled at me with the deadly viciousness of a bulldog, at the same time striking at me with the heavy whip. Like a keen knife the cruel lash bit into my left cheek, and laid the flesh open to the bone, so that the warm blood streamed from it and ran down into my neck. It was all I could do to keep myself from leaping at the monster; but both Teddy and I profited from the lesson, and henceforth guided ourselves accordingly.

After a few more desultory remarks our two guards left, and we were alone with our future masters.

When Traz had finished with his swinish feeding, he lumbered heavily to his feet. From a rack against the wall he took down a sort of helmet, with a metallic top of dark metal, which he slipped over his thick head. For vision a pair of thick-lensed goggles were provided, and for speech and breathing a sort of megaphone, short and squat, protruded.

The helmet adjusted to his satisfaction, Traz put on a pair of heavy gloves of the same white cloth, and over the regular laced boots of leather he slipped on a pair of thick-soled slippers, which appeared to be fashioned out of some wood-like material, blood-red in color.

A vague dread began to form in my mind. What sort of mine could this be, if the foreman required such elaborate precautionary measures for his bodily safety? And where was Teddy's protection and mine?

With a few preliminary flicks from his whip Traz urged us to a tightly closed inner door, and we emerged out into a rather dimly-lit, long tunnel—a drift, in mining parlance—and began to walk along this rapidly, driven by frequent whippings from the gorilla man, who walked behind us.

Smaller passages branched off from the main drift at intervals of a hundred feet or so, side drifts, and as we passed their narrow mouths silent, human-like figures emerged from them, with clanking chains on arms and legs like us, their frightfully emaciated bodies bent nearly double under the heavy baskets filled with ore on their backs. Staggeringly they carried their loads to openings in the floor of the main drift, and dumped them. Then, their heads drooping in utter weariness and their thin arms dangling lifelessly at their sides, they returned whence they had come, with dragging feet and sagging knees; the clanking of their manacle chains forming a sort of terrible, dismal accompaniment to their stumbling steps.

Not one of these unfortunates looked up or took any notice of us as we passed them; as if they were not conscious of our presence, and as if they were indeed what they appeared to be, shadows of what had once been men—human shadows without a soul!

The dread within me deepened. Was this what Teddy and I were to become—wretched specters of men with clanking chains rattling against the bones of their already half dead bodies? Was this what Taman in his awful wisdom and merciless justice had called the "double death"?

I dared not look at Teddy, who strode at my side in grim silence, with his eyes fixed upon the rock-strewn floor of the drift. Was he too thinking about these horrible possibilities?

A vicious cut from the gorilla man's whip burned suddenly across my shoulders, and I stumbled and shuffled onwards more quickly.

On—and on—and on—drift after drift—at hurried pace—was there no end?

"In here, you worms!" Traz bellowed suddenly, unnecessarily emphasizing his command with a few quick blows of his whip that felt like white-hot knives on my already torn and bleeding back.

It was the very last drift into which we stumbled half blindly. The air in the main drift had been heavy and oppressively warm, filled with stifling smells, which had steadily increased in foulness as we penetrated farther in. But now as we entered the still more dimly lighted side drift, a wave of air, ten-fold more fetid and hot, surged against us—a nameless, horrible stench of unclean, sweaty bodies, and of corruption and decay that was utterly nauseating, so that I involuntarily recoiled from it. But the merciless whip from that monster in human form behind us steadied me, and with gritting teeth I stumbled on after Teddy, who was si-

lently and doggedly forging ahead a pace or two in the lead.

Sudden Action!

A PECULIAR greenish luminescence began to grow gradually ahead of us, increasing in brightness as we advanced. And then, abruptly, we emerged from the drift into a long rectangular hollow in the rock, at right angles to it, filled with an unearthly green light, and peopled by nameless, horrible shapes in human form.

A corner of hell!

The thought leaped to my mind with the force of a blow as I stared about me in a sort of hypnotic fascination. About thirty feet in from the mouth of the drift was the far wall of the large mining chamber, or stope, extending more than a hundred feet each way, and perhaps twenty feet in height, and the entire wall glowed with green, flameless fire!

Evidently that glowing mass was ore. But what kind of ore? Could it be radium? Or was it perhaps a still more powerful, radioactive mineral, unknown to us surface people?

All this went through my mind in the space of a few seconds while Traz herded Teddy and me towards a place in the wall where a ladder led up to the first of the two terraces into which the wall was lengthwise divided. Perhaps half a hundred human skeletons worked on the two terraces and on the floor below, amidst an infernal, incessant jangling and clanking of chains, digging out the soft-appearing ore with sharp-pointed picks and throwing from the terraces to those below, who filled it into carrying baskets, two men helping to load the filled basket onto the back of a third, who staggered out with it to the dumping chute. It was an astounding primitive method of mining in such a progressive land as this, and was undoubtedly designed to furnish hard labor for criminals.

But amidst the clanking of chains, the noise of picks and shovels, and the groans of heavily-laden workers another sound arose suddenly, a dismal, sobbing wail, coming from an unfortunate convict who had collapsed near the foot of the ladder, lying beside the overturned basket of ore he had evidently carried.

"Up—you son of filth!" Traz roared furiously, and swung the terrible whip with all his might.

Never had I seen any person so emaciated as that unfortunate worker. His ribs were high ridges, over which the brownish, leathery skin seemed drawn to extreme thinness, and the softer parts of his torso, under the ribs, appeared to have receded to the very backbone. His limbs were merely bones held together by wire-like sinews and ribbon-like tendons by means of which the stringy, rubber-like muscles seemed insecurely tied to them. He had held his face covered by his crossed arms; but now as the cruel whip cut across his ribs he writhed horribly, and lowering his arms emitted an appalling scream of utter anguish and fear. But it was the face of the sufferer which held me spell-bound with horror —a hairless, fleshless area without nose or lips, and a perpetual, horrible mirthless grin of decaying and broken teeth, from the lidless eye-sockets of which two large, terror-filled eyes glowed with the green light of the ore above him!

Again and again the furious gorilla man swung the heavy whip pitilessly, and when in his anguish the unfortunate victim of the terrible punishment turned over on his knees in a desperate endeavor to rise, we had the ghastly view of his back, covered with a dense mass of frightful ulcers, running over with thick streams of corruption.

But still the merciless flaying continued.

It was more than red blooded men could endure. A terrible anger against that beast in human form surged suddenly over me. For the moment Traz had his back turned to me. I flashed a signal to Teddy with my eyes, Like lightning my long arms shot out over the head of the gorilla man, while at the same time I rammed my right knee into his back, and the next instant I had drawn my wrist chain against his windpipe with a force that cut off his breath. He dropped the whip and clutched at his throat with both hands, gasping for air. But at this moment Teddy's chain-wrapped fists crashed against the monster's temple, dropping him to the ground, where he lay motionless; whether dead or merely unconscious we did not know nor care.

I bent over the gorilla man's unfortunate victim, and to my great relief found that he was dead, and thereby out of his misery. Subconsciously I was aware that work had ceased all over the slope, and that the convicts were staring at us two newcomers in silent awe. But I paid no attention to them; for a plan of escape had suddenly formed in my mind.

"Quick, Teddy!—help me undress this devil," I cried. And while we were hastily divesting Traz of his clothes, I hurriedly explained my plan, which Teddy heartly endorsed.

To our great joy we found a Kra in the gorilla man's belt, beneath his outer clothes, and with this we were soon rid of our manacles; but could not, of course, remove the metal wristlets and anklets.

We passed quickly out of that hell of green fire, and crept carefully down the side drift to the main drift. Teddy, arrayed in the gorilla man's clothes and helmet, even to the shoes and whip, walked ahead, his eagerness to carry out the second and infinitely more dangerous part of our plan evidently causing him temporarily to forget the pains that were racking his body.

From the mouth of the side drift we carefully reconnoitered the semi-illuminated length of the main drift. From the mouth of the next drift, about one hundred feet away, one of the sub-foremen emerged, unmercifully driving on a carrier convict before him with his whip. Imitating the deep bellow of Traz' voice, Teddy halloed to the foreman, beckoning to him in the arm-flapping fashion of Raa.

With tensed nerves we watched the man's unsuspecting approach; Teddy just outside of the mouth of the side drift, and I within, ready to leap out at a moment's notice.

"Here I am, Traz, what is your pleasure?" the man asked when he was within a few feet of Teddy, and from his voice it was evident that his mood was surly.

Without a word Teddy motioned for him to follow, as I had seen Traz do, and turned to re-enter the drift, endeavoring to cover me with his body as he did so. But evidently the foreman's eyes were sharp, and he

stopped just within the entrance.

"Who is that behind you?" he asked sharply, with quick suspicion in his tone, and raised his whip.

But in that instant Teddy leaped and felled him with a blow to the jaw. But the fellow was built like a hercules, and the blow did not even stun him. In another moment he was up again, full of ferocious fight. I was ready for him, however, and paralyzed him with a touch of the Kra, which I had charged for just such an emergency.

A few minutes later I had put on the unconscious man's clothes, and we dragged him out of sight behind a pillar of rock. Without further delay we walked along the main drift in the direction of the foreman's rest room as fast as our clumsy blood-red overshoes would permit, grimly ready to fight to the death if need be.

So far our plan had worked out all right. But our greatest obstacles were still before us. However, it was either win or die.

"Let's use the heavy ends of our whips for clubs, Teddy," I whispered as we came within sight of the door of the rest room.

Three men were seated at the table as we entered. They had taken off their helmets and were playing a sort of game with round and square pieces of stone. We walked up to them as if we too were going to sit down. Almost simultaneously the handles of our whips crashed down onto the heads of two of them, and they sank to the floor without a sound. But the third one sprang up and showed fight. However, Teddy knocked him over with a blow against the neck, and I finished the good work with a paralyzing touch of the Kra.

Without delay we leaped to the door of the elevator which luckily was up, and rammed the control lever down to the limit, dropping into the depths with frightful speed But the automatic control of the elevator checked it in time, and we came to a gentle stop.

We peered out into the traffic tunnel. One of the ore conveyors was just finishing loading. Without a moment's delay we swung to the top of it and flattened out on the soft ore. We didn't know whether the operator had seen us or not. But we were in a devil-may-care mood, and it did not bother us. And besides, the insulating clothes we wore were a most effective disguise. But for how long? Just as the conveyor started away, we saw the elevator move upwards again. Was it called to one of the other levels?—or was our flight already discovered?

CHAPTER XXII

Running the Gauntlet

It seemed hours until our conveyor arrived in the great terminal chamber. Signals flashed—red—violet—green—yellow—in rapid succession. Had our escape yet been discovered, and were some of those signals perhaps commanding our car to stop? The vehicle slowed down. We flattened ourselves still more against the dangerous ore, sliding in farther between it and the lip of the opening, and, with all our nerves tensed to the limit waited grimly. Were they about to rush us?

The conveyor had slowed down to quarter speed now and was passing across the glass-like floor of the terminal. Then it had reached the mouth of the exit tunnel and plunged into it, on the last lap of its journey. I drew a deep breath of relief, and relaxed. It was possible that our escape had not been discovered after all. Teddy too had relaxed I noted, and I would have liked to speak to him; but I dared not, fearing that the operator might hear me.

Once again the tunnel lights above us flashed by in a continuous ribbon of bright fire as the car hurtled along at top speed—

Suddenly we were out of the tunnel, crossed the wide intervening space, and slid smoothly into the portal of the end terminal—the great double pyramid—whence we had but recently started into the mine.

We were now in the opposite wing of the immense building, however, and by raising my head cautiously a merest trifle I perceived that we were moving at slow speed towards a gigantic elevator wheel, exactly identical in appearance to the one we had seen in the wing of departure. I also noted that there were now two cars ahead of us and three behind us, and that a considerable number of workers and bosses were about.

"Let's wait until we get upstairs before we try to get out," I murmured with my mouth close to Teddy's ear. "Chances are there won't be so many eyes up there."

He nodded assentingly.

"I'll bet a dozen pairs of new socks Sarro is still here," he murmured back. "I saw one of his men just before we entered the building."

This was bad news. Because, with the satanic minister of police at hand, our chances of ultimate escape would be slim indeed. It would be a fight to the death between him and us.

Our conveyor slipped noiselessly into one of the elevator cylinders, and in a series of stops and starts we rose steadily above the ground floor. Once more we were tensely alert. It seemed reasonable to assume that by this time our escape would have been discovered, and that everybody would be on the lookout for us, especially Sarro and his men, if he was indeed still here.

My wounds, due to Traz's merciless whip, were now beginning to pain and burn terribly, so that I had to bite my teeth together to keep from groaning aloud, and a glance at my nephew's almost unrecognizably bruised and blood-covered face indicated to me that he also was suffering. I realized, of course, and no doubt Teddy did too, that our agony was in a great measure caused by the deadly radiations of the ore on which we lay, but we were helpless to prevent this in our predicament. It was a case of suffering silently, and sensing the tortures of the damned.

In my pain and impatience it seemed an eternity until we finally reached the upper floor, our elevator cylinder having now attained to the highest point in the immense wheel. The instant it stopped, the unseen operator of our ore car ran it out of the cylinder onto a gigantic conveyor belt of metal, which evidently worked in exact synchronism with the elevator wheel, traveling and stopping at the same moment. This great conveyor belt carried the ore cars in a continuous lateral row towards the middle part of the vast building, where the ore from

them was dumped from trap doors at each side of their bottom into an immense container below.

A narrow walking platform ran along the far side of the conveyor belt, and it was upon this that our attention immediately centered. No sooner had our ore car come to a stop on the belt, than Teddy and I slipped out of it, gained the walking platform, and started away in a direction opposite to that in which the conveyor belt moved. We had removed the insulating slippers from our boots in the car, and now walked with more freedom and less noise.

A stairway appeared near the far end, leading downwards, and this we descended warily. Halfway down we suddenly stopped dead still. At the bottom of the stairway six grim men had appeared from nowhere, and it did not require the glittering Kras in their hands to inform us who they were. Their peculiarly marked, yellow and purple police uniforms could not be mistaken. Impulsively we turned to retrace our steps and saw five others gazing down at us from above. One of them was a few steps below the others, moving steadily down toward us, and I recognized the evil features of Sarro.

Simultaneously almost we pulled off the now useless helmets, and hurled them at the men below. Our eyes met and we gripped hands hard.

"Let's remember Custer's stand, Teddy," I said huskily. "And let's show these devils how two red-blooded Americans can die!"

Grasping our whips like clubs, we turned to meet the advance of the five men from above, when a glance over the banister sent a sudden ray of hope into my heart. A long metal tube, three or four inches thick, ran freely from the top of the building to the bottom, coming within about five feet of the stairway.

"We've still got a chance, Teddy—follow me!" I shouted.

The Last Stand

THE next moment I had swung myself over the banister, and leaped for the tube. Throwing my arms and legs about it, I slid down its length to the bottom, like our American fire-fighters answering a hurry call. I had hardly landed, however, when Teddy was already at my side.

"Great stuff!" he cried exultantly. "This'll keep them guessing for a minute or two."

A lightning glance about revealed a large door nearby, partly open, and we leaped towards it. Behind us, through the deep roar of machinery, we could hear the angry shouting of the baffled policemen, and from above came the sharp, clarion-like voice of Sarro. Then we were through the door and slammed it shut, ramming its heavy latch into place.

Before us stretched a long, empty corridor with many doors. Teddy was about to hurry on down its length, when I caught him by the arm.

"Wait!" I whispered. "Beyond there lies unknown territory, and like as not we'll trap ourselves. Listen." In a few quick words I explained the new scheme that had leaped to my mind.

We heard Sarro and his gang at the door now, and their Kras made short work of the latch. They flung it open and rushed through it into the corridor with Sarro in the lead like a pack of wolves on a blood scent; and in their haste they little dreamed that Teddy and I stood flat against the wall behind the open door, listening to the turmoil of pursuit in the corridor and the opening and slamming shut of numerous doors as they searched for us madly.

The noise of the searchers receded quickly, and presently Teddy squatted down and peered through the hole in the heavy metal door where a Kra had burned its way to the latch. He glanced up at me and nodded.

"Coast is clear," he whispered.

Without further delay we slipped forth, passed quickly through the door opening back into the hall with the staircase—and ran squarely into the path of one of Sarro's men, who had evidently been left there on guard by the crafty police chief.

Evidently the fellow was even more surprised than we were; but his thinking processes were much slower. For while he was still making up his mind what to do about the matter, Teddy snatched the Kra from the fellow's hand with a lightning flick of his whip, and I landed on his head with the handle of mine. Over his prostrate body we bounded to the open door beyond the foot of the staircase, and in an instant were out in the open.

"Question before the house is: What now?" Teddy asked with grim humor, as we hovered for a moment or two just outside of the door.

Suddenly we heard shouts within the building approaching. Quite evidently the wolf pack had discovered the false scent, and was coming back to investigate. That decided us. Quickly and noiselessly we slipped around the nearest corner of the building, and with all speed began to run towards a tower-like structure a hundred yards or so away, the appearance of which somehow seemed to promise at least temporary safety, Teddy's long, ruddy hair as we ran streaming out behind him like a flame.

But we could not have traveled more than twenty or thirty yards, when there was a great shouting and yelling behind us, and over my shoulder I glimpsed Sarro and his band hot on our trail.

We ran desperately then, but the heavy mine-foreman's clothes encumbered our movements badly, and what we had gone through had severely sapped our vitality, especially my own. Noticing me lagging behind him, Teddy immediately slackened his own pace, dropped to my side, and grasped my arm strongly to help me along. But the pack behind us were now gaining rapidly, and I realized that I could not hold out any longer. I was at the end of my strength.

"I'm — afraid — I'm — done," I managed to gasp. "Let's — stop — and — die — fighting."

But even as we slowed down to face our relentless pursuers for our last stand, there came the rapid beating of great wings above us, and the next moment both of us were caught up into a sort of dragnet which carried us upwards with great speed in the direction where we had been running. I heard the chorus of furious yells from the wolf pack below—becoming rapidly fainter—was conscious that Teddy was speaking to me excited unintelligible words—and then everything became a blank.

Noama's Story

THE rhythmic beat of wings, the rushing of warm, aromatic air about me, and the gentle murmuring of voices in the near distance gradually filtered into my consciousness, and, somehow, there was a soothing quality about these sounds that caused me to lie where I was in quiet content, and for a long time do nothing but listen, too indolent even to open my eyes.

And presently another fact obtruded itself into my passive mind: In some inexplicable manner all burning and pain appeared to have passed from the whip wounds on my back and in my face, which gave me a most pleasant feeling of well-being. How had all this come about?

I opened my eyes and passed a slow gaze of sleepy curiosity over my immediate surroundings.

I lay on my right side, in a sort of hammock which was very soft and comfortable, and above me an awning of dark cloth was stretched. Beyond this awning I perceived a kind of low wall of emerald green color, and beyond that again extended empty space, lit up by the golden glow of miniature suns from above. My wandering mind finally concentrated upon the sound of great moving wings, and I understood: Once again I was a passenger on one of the bird-like flying ships of Raa.

But whose ship?

The sheer magical manner in which Teddy and I had been snatched away from the very teeth of Sarro and his wolf pack flashed into my mind, and I sat up quickly, suddenly wide-awake.

At the bulwark in the fore part of the airship, on the opposite side from me, I saw two figures standing quite close together, with arms about one another and heads touching—a man and a woman. And there was no mistaking the ruddy hair of the man, nor that of the woman, whose long and black wavy tresses shone like silk in the bright light from above.

A wave of gladness passed over me. So Noama, daughter of wisdom, had outwitted Sarro again, and had wrested Teddy and me out of his cruel and greedy claws in the nick of time.

I called out to the two lovers then, and they immediately turned and came towards me, with arms still about each other. In surprise I noted that Teddy had on a new and splendid set of flying belts and boots. But when they came nearer I was utterly astonished to see that his face was not only quite free from blood, but, that in some miraculous manner the cuts and bruises on it were nearly healed.

Smiling and radiant with happiness the two splendid young beings stopped by the side of my hammock, and Noama placed her hands on my shoulders in the Raanian custom of salutation.

"Greetings, Uncle Ned," she said gently, and there was genuine sympathy and affection in her beautiful, shining eyes. "I hope you feel better now."

"Greetings, Noama—hello, Teddy," I said. "Yes, I do feel better—surprisingly so, in fact. But my head seems to be filled to the top with question marks. To start with: how, in the name of wonders, did you happen along so opportunely?"

"It was quite simple," she said, smilingly. "Through one of my workers in a field near the pump station where you were hiding, I learned that Sarro had captured you two again. So I obtained the service of the owners of this vessel, two devoted friends of mine, and traveled with them to the mine only a very short time behind Sarro.

"We floated above the mine buildings, out of possible sight, and took turns at watching things below through a Cee, an optical instrument similar to the binoculars in your world, but much more efficient. It seemed a long wait to me, and I was just about to do something desperate, when through the Cee I saw the two of you ride out of the mine on top of the ore carrier. You were disguised by the mine clothes, of course, but I immediately guessed your identity; for I knew that as a regular rule all foremen upon leaving the mine rode in the control cabs of the ore carriers.

"I quickly conferred with my friends, and we dropped the airship to a lower level. Then when I saw Sarro and his men rushing hastily into the mill building just a fraction of time later, I knew that very soon something vital was going to happen.

"But when finally you ran out of the mill building, and I recognized my beloved Tedde-e by his lovely fiery hair, we sent the airship down like a flash, with the net ready, and caught you just in time."

She stopped and broke into quick musical laughter.

"One of the most satisfying sounds I have ever heard in my life was Sarro's bellow of rage, when he saw his prey whisked away right from in front of his spying nose," she explained with vindictive gratification. "He is an inhuman monster."

"You saved our lives," I acknowledged with earnest gratefulness. "I shall never forget that. But tell me, where are we bound to now?"

"We are on the way to Noo, city of content, the home of my two friends," she explained. "Just this side of Noo we three are going to leave them, and continue on our way to the forbidden portals with the three sets of wings I brought along for the purpose."

This was wonderful news, of course. Teddy led me down below decks, where I was introduced to Noama's friends, two quiet and courteous young men, sons of the governor of Noo. And then my nephew led me to a room where a new set of flying belts and boots awaited me, and also a soul-satisfying meal which I needed badly. And while I was eating Teddy told me that by means of ointments and a Loo, Noama had accomplished the almost miraculous healing of our wounds.

"She's the only girl of her kind in the world!" he said enthusiastically; and I heartily agreed with him.

The Secret Passage

WHEN we drew near to the place of parting, we took our leave of Noama's two friends, and with our wings strapped on securely and our belt pockets crammed with the things needed for the voyage, filed out onto the tail of the gigantic bird ship and took off easily.

Turning on the maximum speed of which our wing machines were capable, we split the heavy air like a trio of migrating swallows, flying so high that the sev-

eral cities which we passed appeared like tiny toy towns, and so much nearer to the miniature suns above us that their heat was rather unpleasant, and their light dazzling to the eyes.

I flew immediately behind Noama and Teddy, and overheard him ask her what the little suns were, and how their light and energy was maintained through so many ages since their establishment.

"It is a secret of the supreme council," she answered. "I only know that certain chemicals and properties are extracted from that very radio-active ore which you saw in that terrible mine, and that at certain regular periods some of the wise men ascend to the suns in a specially constructed and insulated airship, and replenish their used-up substance."

* * * * *

We had nearly reached the border of the arid, semi-lighted region, when Noama bade us lower our speed and wait for her, while she described a U curve in the air, and by means of her Cee observed the air levels far in our rear with concentrated attention. A few minutes later she caught up with us again, and I noted that her face was grave.

"Sarro and his creatures are following us!" she announced. "They are traveling in one of the large government airships, any of which can easily double the speed of our wings. It means a race against death for us now!"

"But how do you suppose he caught on to our trail so quickly?" I heard Teddy ask her, when we were under full speed again.

"His spies are everywhere in the land," she explained in a tone of contempt. "He probably radiated the news of your escape to all his agents, and it is just possible that one of them saw us in the air through a Cee. But no matter—they have not caught us yet!"

How could one but admire a girl with a spirit like that.

We rushed onward. And from time to time I glanced back over my shoulder, searching with my eyes for a glimpse of the pursuing vessel. However, it was quite a while before I at last saw it—a shimmering dot far, far in the rear, gleaming through the bluish-golden haze like an evil, demonic eye, which with each passing moment grew ever larger.

The region below us was now the arid, and boulder-strewn desert region with which Teddy and I were already familiar. And far in the distance ahead of us, indistinct because of the scant light over the desert, the immense wall of the cavern beckoned to us, rising into the vast, unknown heights like gigantic cliffs of white ice.

Would we be able to reach our destination before Sarro overtook us?

A region of peculiar, low and sharp ridges lay ahead of us on the great plain, and, with Noama in the lead, we gradually angled down towards this.

Another glance backwards revealed Sarro's pursuing vessel quite plainly now: an immense bird-shape of gleaming metal, whose gigantic wings flashed like swift red lightnings, rushing menacingly towards us with frightful velocity.

It seemed only about one hundred yards from us, when Noama cried a quick warning to us, banked sharply to the right at right-angles to our late line of travel, and dipped down at a steep incline. Teddy followed her easily, but it required all of my nerve and presence of mind to execute the movement without turning a somersault in mid-air.

So sudden and unexpected had been our move that quite evidently the operators of the great airship were taken completely by surprise; for it shot swiftly past the spot where we had turned, and continued on for quite a distance before it began to turn in a long arc.

In the meantime we three fugitives had shot downwards with the speed of attacking eagles, and even before the huge mechanical bird had managed to turn we had attained our objective: a wilderness of sharp, criss-crossing low ridges, and were landing in a sort of deep cleft between two of them. It was a difficult landing, and I almost broke my neck, tumbling over and over at least twice.

"Quick!—in here!" Noama cried sharply, and we sprang beneath the overhanging lip of a cliff, with both of them helping me into the dim recess. And we had barely managed to get out of sight, when the great vessel passed by overhead, so low that the strong back wash of its gigantic wings whirled up the age-old dust from the bottom of the cleft where we had landed.

With the rapidity of a conjurer, Noama produced from her belt a narrow tube with a cone-like head, such as she had provided for each of us, and manipulated a tiny lever in its side. Instantly a sharp ray of greenish-white light leaped from the tube, lighting up a dark hole in the farthest corner of the recess, down which we scrambled as fast as our wings would permit.

A sudden joy pervaded me as I realized that this must be the entrance to the secret way to freedom of which Noama had spoken to Teddy and me.

We climbed down a very rough, natural shaft in the hard rock for about thirty feet or so, passed through several small caves in rapid succession, and finally arrived at the very narrow and steep bank of a small subterranean river, the waters of which rushing along invisibly far below us, had eaten their way so deeply into the rock that the river bed itself appeared like a narrow, black cleft.

At the bank of the river Noama stopped and faced us.

"We will have to remove our wings now," she murmured cautiously. "Because henceforth we will have no use for them, and they will only hinder our traveling."

"But I thought that we would be able to use them in ascending to the surface," I whispered protestingly.

"No, no—it would be impossible to fly in the shaft. There is not sufficient room with the continuous turning of it," she explained.

Rapidly we helped each other to remove the wings, and upon Noama's suggestion hurled them down into the invisible river. In single file, with Noama lighting the way ahead, and with me bringing up the rear, we passed along the treacherous, narrow and precipitous bank of the river, whose rushing noise awakened ghostly echoes all about us.

At intervals we stopped, and with the light turned out searched the impenetrable darkness behind us with

our eyes and ears for signs of pursuit. But there was never a glimpse of light, nor a sound in our rear to indicate that we were followed.

"Maybe they have given up the search," I said hopefully on one such occasion.

"You do not know Sarro, if you think so," Noama said grimly. "He is a demon. It is his boast that never yet has anyone evaded his clutches, and that he never gives up the chase after a transgressor of the law."

We continued on; walking as fast on the precarious path as was consistent with our safety, and presently, seemingly in the near distance ahead of us, a patch of luminosity became visible.

"What is that light ahead, Noama?" Teddy asked tensely.

"Nothing to worry about, beloved Tedde-e," she answered gently. "It merely means that we are nearing our goal, the secret entrance to the second shaft, just beneath the foot of the great wall."

CHAPTER XXIII

The Battle Over the Abyss

WITH breath-taking abruptness the river bank terminated at the sharp edge of a great chasm of irregular outlines, the almost smooth, perpendicular walls of which fell sheer into unknown, awful depths. About one hundred feet below where we stood, the hitherto invisible river shot forth in a solid column of foaming white waters, and hurled itself with reckless abandon into the black maw of the abyss; its impact as it struck, far, far down, sounding like the continuous rolling of distant thunder, and filling the entire place with a ceaseless, droning roar.

However, none of these things held my attention for more than a moment. For, like a magnet draws iron, so my eyes were drawn to the marvelous natural bridge which, like a great, flattened bow, spanned the abyss from lip to lip—a curved ribbon of milk-white stone—the remains, evidently, of an ancient ledge.

There was an opening somewhere in the rocky roof above the abyss which must have been located almost directly beneath one of the rare suns of the upper region, for a strong light fell down through it that illuminated the entire middle section of the bridge, and endowed its marble whiteness with a strange, magic beauty.

"Great Jupiter!—what a beauty!" Teddy exclaimed through the droning roar of the falling waters.

But we had no time for further admiration of the bridge, for, by way of a narrow lip of rock that jutted out from the wall, Noama led our march to the foot of it. But short as the distance was, my heart was in my mouth all the way, the while I clutched desperately at each bit of outcrop in the wall to steady me. However, if it had not been for the training due to my wing flying, I doubt whether I could have made it at all. Teddy, of course, knew about my natural tendency to vertigo, and several times turned his head to glance at me with affectionate solicitude. But each time he did so I managed to grin at him cheerfully, to his evident relief.

But that bridge!

As I have said, it was a mere ribbon of stone; and now, looking from the foot of it, I saw that its width was scarcely more than three feet, and on both sides of it that awful, black gulf of nothingness— Shudderingly I heartened myself for the dizzy journey across.

"Think you can make it, Uncle Ned?" Teddy asked anxiously, with one foot already on the rough surface of the bridge.

"You can bet your dozen of new socks I can!" I answered stoutly, hoping that my legs wouldn't begin to shake and betray my quaking soul

Teddy laughed delightedly, and proceeded to follow Noama, who during our little dialogue had been smilingly watching us, but who was evidently in a hurry to cross the bridge. The two of them began to walk along that narrow ribbon of stone as unconcernedly as if it had been a wide sidewalk on any city street, and for a few moments I could do nothing but watch them fascinatedly.

They had almost reached the middle of the bridge, when at last I was able to make up my mind to follow them. But I had taken only a few steps, when I felt an attack of vertigo coming on, and immediately got down on hands and knees. It made be feel very foolish, and embarrassedly I glanced ahead to see if perhaps Teddy or Noama had noticed my awkward predicament. They had not. But I saw something else, beyond them, which filled me with utter consternation:

From the deep shadows at the opposite end of the bridge a demoniac figure stepped out into the light, and came slowly and menacingly towards Teddy and Noama. Sarro had outguessed us again!

The satanic Raanian's face was distorted by a mocking smile, and in his right hand, ready for instant action, he held a Kra. Spellbound I watched Teddy quickly twist himself and Noama about on that dizzy, narrow spot over the frightful abyss, so that it was now he who confronted our relentless enemy, and I saw the tensing of his great back muscles as he waited for Sarro's approach.

Presently, when the latter was only a few feet from Teddy, I saw the moving of his sneering lips, and knew that he was speaking. What happened next was almost too fast for my eyes to follow:

I saw Teddy launch himself suddenly forwards, and lead a lightning blow to Sarro's jaw. However, having evidently learned from past experience, the wily police chief evaded the blow by a quick motion of his head, and Teddy just saved himself from toppling forward by delivering a choppy solar plexus punch. At the same instant Sarro slipped his right arm under Teddy's left armpit, and touched the back of my nephew's head with the deadly Kra.

But even as the resistless paralyzing force swept through him, Teddy wrapped both arms about the big Raanian's neck in a deadly strangle hold. For one awful moment they hovered at the edge of the bridge—then together they shot over the brink into the black maw of the abyss.

The Passage!

AS if turned to stone, Noama stood there at the edge of the bridge rigidly motionless, and stared down

into that awful void which had devoured her beloved. Then, with a wailing scream of utter despair that will forever echo in my soul, she suddenly flung both arms above her head, and threw herself into the boiling and thundering pit.

So quickly had it all happened—within a few moments only—that my dazed mind could not grasp the terrible reality—could not realize that the awful catastrophe had actually happened before my own eyes, and within a few yards of me: two splendid young lives, all that I had held dear in the world, had been extinguished in one short moment, like two tiny flames snuffed out by a breath of air!

Sick at heart and soul, and shaken to the very foundations of my being by the horror of it all, I crawled out over that dreadful abyss to the center of the bridge, and called their names—screamed them—for hours—until I was upon the brink of madness.

It's probable that I fainted then; for presently clarity of mind returned to me, and I was conscious of having lain there on the bridge for a long time, as my cold and numb limbs attested. Nauseated, and with my body trembling in every fibre I crawled on to the shadows at the far side of the pit, hardly knowing what I was doing.

That end of the natural bridge terminated in a fairly spacious platform of more or less even stone, and there, a few feet away from the edge of the chasm, I dropped in a heap from sheer nervous exhaustion, and lay there weeping and sobbing like a child.

But suddenly I sat up, electrified by what I saw: I was facing the end of the river bank on the far side of the abyss, along which, but so recently, my loved ones and I had traveled, and now, in the far distant darkness along its course, I perceived the winking and flashing of many lights.

Sarro's men were coming in search of their chief, probably alarmed by his long absence. It seemed reasonable to assume, in view of what had happened, that the constantly spying police chief had somehow discovered Noama's secret anent the secret entrance, at least partly, and in a spirit of bravado, or more likely to regain lost prestige in the eyes of the supreme council and his subordinates for past failures, had decided to capture us single handed; having probably discovered by means of watching us through a Cee that none of us were armed. But now his men were coming to find out what had happened.

Well, they should *not* catch *me*—I would die first!

I tried to remember all that Noama had told Teddy and me about the secret opening leading to the ancient immigration shaft—the road to freedom.

Freedom!—Home!

The thought steadied my nerves, and caused new strength to flow back into my limbs. A quick search revealed a narrow, irregular opening in an almost invisible nook back of the platform, and through this I managed to squeeze myself without delay. With the light tube from my belt I found that I was in a very narrow cleft, which appeared to widen towards the top.

Jamming the lighted tube into my belt so as to leave my hands free, I began with all haste to work myself upwards between the two walls, using the uneven places on them for hand and footholds.

The cleft terminated in another but smaller level, whence three further clefts, or rather cracks in the rock led in three different directions. A quick calculation as to the location of the shaft from where I was induced me to choose the opening to my left. I followed it eagerly—and brought up against a blank wall. No opening of any kind anywhere. My heart sank in dismay. Had I taken the wrong turn after all?

From somewhere below I heard the murmuring echo of voices, and knew that Sarro's men were nearing the abyss. Frantically I searched the wall again, even getting down on hands and knees. And then, when I had almost given up in despair, I found it—a small, irregular hole almost level with the floor, and hidden beneath an eyebrow-like rocky protuberance. Eagerly I pushed my hand with the light tube through it, following with my head. I almost shouted for joy—just below me a smooth-walled, gently curving passage stretched upwards.

The road to liberty lay at last before me!

With some difficulty I hastily worked my body feet first through the narrow opening, and allowed myself to drop the few feet to the smooth, rocky floor of the age-old shaft. Then, taking a deep breath of the somewhat musty, but fairly breathable air, I started on my long climb to the surface. Would I be followed?

CHAPTER XXIV

The Struggle to Freedom

ONWARDS and on—upwards and up, stopping merely for brief rests, and to partake of the concentrated food essences and the cooling fruit juices in flat metallic containers which in her wisdom Noama had provided—thus I struggled with all my might to attain my goal.

On—on—on, in solitary, awful monotony; my only companions my light, my ever changing shadow behind me, and the hollow echo of my footsteps. Often I stopped to listen intently for sounds of possible pursuit, but heard nothing more than the pounding of the blood in my ears, and the wheezing of my lungs, protesting against the impure, dead air.

Round and round—up and up, led the marvelous shaft, the sameness of its smooth stone walls broken only by the occasional empty light receptacles in its ceiling, and the round openings of air ducts at the extreme upper edge of the outer wall, most of which, if one judged by the condition of the air, were not in working order.

I continued to mount; now walking in the groove at the center, along which in the far past age of the Primarians, their great transport vehicles had whizzed by, and again on one or the other side of it, by preference choosing the inner, shorter route. And as I trudged on I calculated that, according to the screw-like shape of the immense shaft, I had to travel approximately seven miles in length to attain one in height. Seven times sixty-five miles. Think of it!

Onward—onward—onward.

Time had ceased to be, and everything in creation, except that interminable winding passage and the mite

that was I, creeping, creeping along its endless miles, my mind benumbed from the constant strain—

Hour after hour—day after day—tramp, tramp, tramp—swallowing a little nourishment—sipping a bit of moisture—dropping in a heap from sheer exhaustion—dozing in a torpor—onward again—on—on—

And then came the day when I heard them!

It was scarcely a sound that drifted to me from somewhere far below—hardly a whisper. Yet that strange faculty for perceiving the otherwise unheard and unseen carried the message to my consciousness, and I *knew*.

They should *not* capture me again!

I became like a madman then, with a madman's strength. Forgotten was the leaden heaviness of my suffering, wounded feet. I did not walk now—I ran. Up—up—along that endless, pitiless incline; away from that menace which was creeping, creeping nearer. . . .

My brain was on fire, my breath came in painful gasps, my burning eyes seemed about to leap from their sockets, and my throat felt as if molten lead were pouring into it. I stopped for an instant to relieve the burning pain of it with the last precious drops of cooling fruit juice. On again in the mad rush to freedom.

And then—checkmate!

An impenetrable wall rose suddenly in my path: a wall of great round boulders jammed tightly together!

A wave of absolute despair came over me then. Like a caged wild beast I clawed at the wall that seemed to mock me, and raved and cursed like a maniac. But suddenly, with a complete reversal of feeling, I threw myself onto my knees and prayed for deliverance.

The echo of my pursuers' voices sounded nearer now.

Quickly I arose from my knees, and with my light examined the wall of boulders with keen attention. One of the great rounded stones appeared to be the key to the jam, and, placing my light tube on the floor so as to have both hands free, I began with all my strength and speed to work the boulder loose. That I had nothing to pry with handicapped me greatly, and if it had not been for the fact that the key boulder was wedged by several small, sharp-cornered pieces of rock, my task would have been hopeless.

Grimly determined I tore at one of the wedges until my hands bled, and at last got it out. If I could get out one more—

The voices were approaching me rapidly now. Using the removed piece of rock as a lever, I put all my remaining strength into one supreme effort and hove mightily. The key boulder began to slip with ponderous slowness—

Just in time I leaped back to safety. The next moment the jam broke. With a thunderous, earth-shaking roar the avalanche rushed into the depths, sweeping my light tube out of existence, and leaving me there in that terrifying darkness, cowering tremblingly behind a great piece of angular rock which, in its descent, had partly penetrated the wall of the shaft, and expecting each succeeding moment to be my last.

It seemed to me that I heard muffled screams—and then all sound merged into one deafening, grinding roar as the avalanche thundered past me.

How long the terrifying ordeal lasted I have no means of knowing. But suddenly the avalanche stopped, and a tomb-like silence followed.

With utmost caution I crept forth from behind the rock that had so miraculously protected me, and viewed a wondrous sight: Beyond where the wall of boulders had been no sign of the winding shaft remained, but only a hundred feet or so upwards, at a slanting angle from where I stood, the blue, sun-lit sky of my homeland beckoned to me!

With a prayer of thankfulness upon my lips and in my heart, I gradually worked my way upwards through the funnel-like opening, and soon breathed the crisp, pine-scented air of the mountains. I did not know just where I was, but never had the world seemed so beautiful, nor life so delightful as in that moment. But quickly a bitter pain gripped my soul as I thought of Teddy and Noama, entombed in that awful pit.

The position of the sun indicated that the time was late afternoon, and I lost no time in searching for a likely place to scale the smooth, precipitous cliff walls that surrounded the place on all sides. At last I found one, a mere riffle against the frowning rock wall, but it was nearly dark when, almost exhausted from the difficult, dangerous climb, I reached the plateau above.

But soon I pushed on through the wild and rough country; for with the coming of darkness the air had turned bitterly cold and I sensed great discomfort in my scanty clothing. Stopping only for occasional droughts of water at springs, I traveled on through the night, compelled to do so to keep myself from freezing, and hoping that soon I would strike a trail which would lead me to some habitation. Suddenly, through some optical illusion, I stepped over the brink of a cliff and dropped into space —And that is all of my story. You know the rest.

* * * *

There was a silence, a long, pregnant terrifying silence after Gothram had finished. So enthralled were his listeners that they sat motionless, for hours it seems, after his voice had ceased. A weight of nameless sorrow seemed to hang over them, the sorrow that comes from a realization of experiences that few men had known.

Denniston was the first to speak. With almost an apology in his voice he spoke. "And your nephew and Noama? They are dead?"

Gothram brushed a hand wearily across his forehead. "I don't know," he said, slowly. "In all reason they must be. You may think that I am becoming insane; but somehow of late I have become more and more possessed of the curious impression that my beloved nephew is not dead, but lives. It might, of course, be merely a psychical outgrowth of my grief about him—I do not know. But always now—every hour—something within me is waiting—waiting.

"But if I thought that it might be true—that Teddy still lives—I know that God would show me a way to get to him somehow, and would give me the strength of mind and body to rescue him from the clutches of those super-men of Raa. But I don't know. I don't know—"

THE END.

The Martian Revenge

(*Continued from page* 211)

Mars. We didn't intend to let you know until we got back to Earth, but today something happened that seemed to make the Martians furious. After you had gone we came out of our hiding-place in the store-room. Several Martians came aboard and began to ransack the place. We watched them. After a while one of them found something in Danby's cabin. It was a round thing about four inches in diameter and colored brown—probably one of those eggs you were telling about the other night. Anyway, they got perfectly furious over it and hopped away yelling like maniacs. In about twenty seconds the whole city was in an uproar and swarms of ships began leaving in the direction you took this morning. I had found Dr. Grigson's notes and read some of them, so I understood a little about these people. We got the steel chart you used last night when you told the others where the new canal was to be, and we flew according to it. Looks like we came just in time!"

"You could handle the ship alone," said Masters, "but it takes two to pilot and drop bombs. Did Helen—er, your wife, release the bombs?"

"Certainly, dad, she's a brick. You aren't angry with me for getting married, are you?"

"Of course not! Here's all the congratulations of a father to his son," he said, extending his good hand. "Now let's hear what Dr. Grigson has to say."

Dick hurried off to the sleeping quarters and presently returned with the notes. He stopped to look at the body of Danby and then came over to the captain.

"What shall we do with Danby?" he asked.

"Bury him in space when we get out a few days," said Masters. "Let's hear what Grigson says."

He listened while Dick read from a selected page:

"I have tried to impress Dr. Masters with the danger of associating too freely with these Martians. We Earthlings seem to be unique in the scheme of evolution in that we have developed a code of right and wrong, of good and evil. These Martians, however, are more like highly intelligent animals who have absolutely no sense of right or wrong—to them there is no good or evil. So long as they are content with our visit all may be well, but I fear the carnage that might ensue should they become displeased. Judging from their psychological peculiarities I can foresee that, should they become aroused against us, their actions could not be tempered with justice, for they know nothing about justice. Furthermore, in the event of open hostility, they would show no quarter whatever, for such is their total lack of ethical sense. I—"

"Enough!" groaned Masters. "Take it away!"

THE END.

The Radium Master

(*Continued from page* 251)

The very bowels of the Earth seemed to be rent asunder while searing rays of radium rose from the fissures that split across the city. Her subterranean passages, a veritable honeycomb of tunnels, were breaking down under the terrific onslaught of radium. Above the hum of the airplanes' motors, their occupants could hear a low, moaning sound like the onrush of an approaching tornado. The streets were filled with people; the flying field was crowded now by many seeking safety from inevitable destruction.

And twenty-five airplanes sped swiftly northward, barely escaping from the doomed city.

Not a living soul survived Urania. For the whole city vanished from the face of the Earth. Those who did not perish with the city itself were swallowed up by the surrounding jungle.

Since then the calm of the primeval forest has been restored. It will take ages to replace that virgin forest. But Urania is gone, a forgotten thing of the past.

And its futuristic Napoleon and all his power have gone with it. Never again will his cleverly planned monarchy menace the progress of civilization.

THE END.

What Is Your Science Knowledge?

1—What is one of the physical signs indicating the presence of radium? (Page 263)

2—What acceleration in its velocity does a falling body acquire? (Page 250)

3—What is the distance between Mars and the Earth at their closest approach? (Page 251)

4—Name one of the moons of Mars? (Page 253)

5—What is the atmospheric pressure at the Earth's surface? (Page 254)

6—If a man weighed 160 pounds on Earth what would he weigh on Mars? (Page 255)

7—How is it possible to photograph through a fog? (Page 241)

8—What are the uses of pitchblende and carnotite? (Page 242)

9—What is triboluminesence? (Page 247)

10—What is a triceratops? (Page 224)

When The Moons Met!

(*Continued from page 239*)

and then a short, unimportant message from the Tandalian branch of the fleet or the headquarters at Kestra. As time wore on, Iona grew smaller and receded farther into the star-studded blackness behind, the two other asteroids grew correspondingly larger and closer.

After days of travel under high power from the gravity generators, the two ships had attained sufficient speed and the generators were stopped. The vessals now floated free in space, their golden shapes, like a pair of great doughnuts joined side to side with the control-tower sticking up and the horizontal reflectors projecting endways at the junction, seeming oddly out of place against the starry black sky.

At last, one day when the expanding globe of Karkor was drawing near, came the report that the other branch of the Expedition had reached Tandal. Kardel was in the control-tower when the message came through. The face of the commander of *Number Three*, who made the report, was touched with displeasure and annoyance.

"Our task has not been very successful, Malben Robar," he complained. "We have found Tandal to be quite similar to Iona in size and atmospheric density, but the air contains such large amounts of Element 17* that no life, animal or vegetable is possible here. Gathering specimens will also be very difficult, for the men will not be able to leave their air-suits while they are working. And we will not be able to replenish our supply of air for the return journey."

"Well, get a few specimens and then rush back," Malben instructed. "Don't stay any longer than you must; there is danger that some of the poisonous atmosphere may leak into the ship. Well, better luck next time."

The Expeditionary Commander instructed the other to make out a formal report by phonotype and sign it. A photo-record of this was next made at Malben's vision-plate and the commander of *Number Three* was then dismissed. Malben then gave his attention to the navigation of his own part of the fleet, for Karkor was now close at hand. The two ships were now turned about so that the strange world was directly beneath them and the gravitational power was again applied. The apparent size of the foreign planet increased more slowly now, and the depressing effect of weight was once more felt.

Through upper ports a magnificent sight could now be seen. The globes which were Iona and Tandal could be distinguished easily as luminous bodies much larger than the surrounding stars. Tandal in particular was close, and seemed to come perceptibly nearer hour by hour as the two orbits converged. As the voyagers watched through telescopes, they saw two tiny golden specks arise from the surface of the nearer globe and go off into the blackness toward the home port on Iona.

Malben turned to his friend. "Well," he remarked, with a shade of uneasiness in his tone, "We are alone now."

Kardel started. "What is the matter?" he asked. Do you think that there is any danger?"

"There should be none," Malben replied. "We haven't seen any signs of life on Karkor yet, and if there were the inhabitants would have no reason to harm us; we are on a peaceful mission. Still, I almost wish we were on our way home. I feel uneasy for some reason."

Kardel was inclined to scoff at his friend's misgivings, but when he left to go on duty Malben was still uneasy. He remained in the control-tower after his relief had come. Because his anxiety would have prevented sleep, he preferred to stay at the helm of his ship ready for any possible emergency. After a time Malben went below to the entrance-lock in the bottom of the craft, where he could see the tiny world beneath more easily. Hour by hour the sunlit globe grew larger, and the formless apprehensions of the commander increased proportionately. Through his telescope he could now see that there were many expanses of green, indicating vegetation, and a few patches of blue, which seemed to be water on the tiny world. No evidences of animal life could be seen, however, nor anything resembling cities. However, this last question could not be decided until a closer examination could be made.

A Diabolical Force

WHEN the time for the landing arrived, Malben ascended again to the control-tower and took command of the fleet. Karkor was directly below now and very close. The sky began to lose its jet-black color and took on a bluish tinge which became more and more pronounced as the fleet dropped lower through the atmosphere. Soon the commander gave the order to stop the descent of the ships. The two golden space-cars now hung suspended in the rare air of the tiny world, high above its surface. Malben ordered the fleet to cruise slowly on, while lookouts stationed in the entrance-locks kept a sharp watch for signs of human habitation.

As the two ships sailed slowly along, the commander's uneasiness returned, and he ordered a group of men armed with pellet-guns to assemble in the escape-locks and be ready for action. Since the density of the atmosphere was very low and nothing was known of its composition, these groups were clad in air-suits, fur-lined suits which completely covered the wearer and contained tanks of compressed air for breathing. Thus they would be able to leave their ships immediately if it became necessary.

The two craft had cruised for some while without seeing a sign of life, when suddenly a message came from the lookout.

"There is a large dome on the horizon half a quadrant to the right of our course, sir," he announced. "It looks like a building of some kind."

Malben looked in the direction indicated and easily discerned the dome. He changed the course and cautioned the guard to be ready for any contingency.

* Chorine—atomic number 17.

As the fleet approached the dome, it could be seen that there were three of them set in a great equilateral triangle. They appeared to be made of a pinkish metal and were girdled about near the base with many recessed windows. Some of the windows seemed to be not windows really, but the entrances to great culverts or conduits of some kind.

While Malben was scrutinizing the strange domes and trying to puzzle out their significance, a metal plate in the top of the nearer one slid back and a stream of weird shapes issued from its interior. Red they were, and shaped like pears, and as they came nearer, it could be seen that they were live beings of some sort totally enclosed in red metal suits. The stream rose mysteriously into the air with no visible means of propulsion save a pair of horn-like devices on the top of each suit. These were surrounded by a corona-like discharge which glowed eerily even in the sunlight. It seemed that some mysterious force which emanated from the protuberances supported and propelled the weird beings. The company of Karkorians rose up to the level of the space-ships and gathered in groups about them, seeming to inspect them and playing a curious yellow ray upon them from small reflectors which were built into the sides of their peculiar suits.

When the Ionan commander looked at the face of one of the mysterious beings, he realized that his fears were not groundless. Never had he seen such a malevolent face on any being before. He realized that the yellow rays were not meant for purposes of curiosity, but were probably some weapon as deadly as they were strange. Turning to the control-board, he ordered the fleet to descend as rapidly as was safe. It was then that the Karkorians struck their first blow. Swift and deadly it was, and over in hardly more time than it takes to tell of it.

As the fleet descended, the Karkorians found themselves above the ships, and one of them was struck with the idea of trying his ray on the green, glassy surface of the gravity reflector. The substance melted away instantly, whisked into nothingness by the diabolical force. Simultaneously with the collapse of the mechanism which supported it, the ship went fluttering downward crazily, and struck the ground with a crash that resounded even through the attenuated air of Karkor. The twisted and broken ruins lay in a heap, testifying to the wanton malevolence and cruelty of the inhuman and heartless Karkorians.

With a gasp of horror, Malben gazed for an agonized instant at the smoking debris. Then, shouting curses, he scrambled into an air-suit and rushed below. He grasped a pellet-gun and tore open the door of the entrance-port, which was slammed to behind him by the blast of air which rushed out when the outside trap-door was raised by the guard, who were almost as furious as the commander. He joined the group, who were now firing madly into the ranks of the Karkorians. His one thought now was to give as many of the inhuman monstrosities as possible a taste of death before his ship too took that awful plunge. The whole contingent was now firing as rapidly as they could aim, and a curse accompanied each of the explosive pellets. Malben remembered a feeling of exultation as he saw the air littered with bloody fragments of flesh and red-enamelled metal. Then a Karkorian ray found a part of the structure beneath his feet, and as his support melted away, he fell twisting down to the surface of the world below. A confused impression of the ship entering its last dive registered on his brain, then there came an agonizing crash and the world went black.

CHAPTER III
A Wild Plan

MALBEN was awakened by the sound of tom-toms in his brain. His head throbbed painfully and his every bone seemed pulverized. He opened his eyes upon a world no longer bathed in mellow sunlight, but shrouded in blackness from which the stars gazed placidly down through the interlaced boughs above his head. How distant and aloof they were! How little they cared for such catastrophes as had just occurred to his expedition! When he thought of the score and more of brave men and true who had gone to their deaths only to satisfy the wanton blood lust of these cased-in Karkorian monstrosities, Malben was so overcome with grief and futile rage that in his weakened condition, he lapsed again into unconsciousness.

When he came to himself a few minutes later, he was able to control himself, and he began to move his arms and legs about, seeking for broken bones. To his surprise, there were none; he was unharmed except for a splitting sensation in his head and a throbbing ache in every joint. His fall from the vessel the day before must have been shorter than he had supposed, and the thicket in which he now lay had probably cushioned his fall somewhat. He reflected on his good fortune in taking his fall on Karkor instead of Iona, where the acceleration of gravity was so much greater.

Pulling his aching body painfully to his feet, Malben staggered away toward the spot where he supposed the ruins of his ship lay. His air-suit was torn, and the rarity of the atmosphere made the least motion a hardship; consequently, his progress was very slow and the sun had risen before he reached the wreckage.

As he gazed upon the ruin of what had once been a wonderfully constructed machine and its loyal and lovable crew, the Ionan went suddenly mad. He wept, he shouted insanely, he cursed the wanton raiders with horrible curses. But after boiling over in this fashion for some time, his emotions crystallized into an intense hate for the Karkorians. His bruised body, his splitting head; indeed, all thoughts of himself were lost in an overmastering lust for revenge against them, the wreckers of his ships, the killers of his loyal crew, the murderers of his best friend.

When Malben looked again at his ship, he noticed that one of the gravity-reflectors was unharmed, while the other was a complete wreck from the deadly rays. Wondering what the reason for this deviation from their usual lust to destroy might be, he approached the ship in order to examine it more closely. He hesitated about going within, fearing to look upon what he might see there, but when he entered, he saw that his apprehension was groundless. The ghastly weapons of the Karkorians left no bloody remains.

Malben pondered for a time upon the question of

why one generator had been spared, but suddenly the explanation dawned upon him. They wanted to save the mechanism and examine it. Perhaps they would build a fleet of ships powered with his gravity-generators and sail to attack Iona! If this were true, they would be returning soon to carry off their spoils. He must work fast.

Malben dashed outside and searched about on the ground. Finally he discovered what he wanted—the part of a Karkorian armor which contained the apparatus for projecting the disintegrating ray. He broke it loose from the rest of the metal suit and examined it, searching for the secret of its operation. He soon discovered that one button caused the wicked yellow beam to leap forth, while another generated a colorless ray which fused almost instantly any substance which it touched. He went back into the ship, and using the disintegrator as one might a cutting-torch, he separated the reflector and all of its machinery from the rest of the craft. Fortunately, the gravity-generator was built as a separate unit and did not depend upon the rest of the hull for rigidity and support.

Malben's plan was by now well formed in his mind, and his next move was to get a piece of long, strong line from the supply-room and make it fast to one of the braces which upheld the gravity-reflector. Then he set the control of the generator so that its force was very slightly more than equal to the attraction of Karkor. The structure rose slowly, and Malben, carrying with him the ray-projector, crawled out of the hole left in the space-ship and dropped to the ground. He moved off across the surface of the small world, towing the delicately balanced mass of metal and glass after him as easily as a terrestrial child tows a kite.

Destruction

THE Ionan headed for the nearest of the pink domes, knowing that here, if anywhere, was a structure with a foundation firm enough to permit him to carry out his insane plan. There seemed to be no sign of life at the dome except a humming sound, as of moving machinery, which came from within. Malben did not hesitate, but raised the ray-machine, and pointing it at the window-studded wall before him, pressed one of the buttons. A great hole appeared in the wall and a blast of air rushed out. Pressing the button again, he disintegrated most of the top and one side of the dome and stepped in, pulling the gravity-generator with him. Fortunately, but one Karkorian was present, evidently the operator of the machines, and as he had no weapon handy, he fell easily before the Ionan's pellet-gun.

Malben floated the mass which he was towing to the center of the floor and made it fast to one of the great air-pumping machines which stood there. The disintegrator was called into use once more, and the machines were razed to their foundations. The gravity-generator was then floated over the wreckage and lowered down upon it. Next Malben called the heat-ray into use, and by using various metal scraps which were lying about and pieces removed from the walls, he soon had the gravity machine welded more securely to the dome than it had been to the space-ship. All was now ready

He saw the globe of Tandal, very near now and almost directly overhead. Stepping to the newly-placed mechanism, he started the generator going and gradually increased the power. The structure creaked and groaned, but to Malben's joy, the foundation held. The dome must have been welded, he thought, to a great subterranean structure, a city perhaps. He could even see the great trap-door in the floor, which had probably closed automatically when the air began to rush out of the hole which he had made. He cared little for this, however; his sole idea was to derange the orbit of Karkor so as to cause it and Tandal to come together and allow the poison-laden atmosphere of Tandal to mingle with that of Karkor. Thus the universe would be rid at a single blow of the menace of the diabolical Karkorians. That his machine was pitifully weak for such a purpose Malben knew, but he also knew that the force needed to disrupt the delicate balance between the two worlds was very little.

Now a stream of red-jacketed Karkorians came out of one of the other domes, bringing with them a great machine with a maze of glowing horns on its top and many spider-like metal legs below, which seemed admirably adapted to lifting and carrying even so large an object as the ruined space-car. Malben laughed grimly at their astonished manner when they saw the demolished dome, and brought his ray into action, sweeping rank upon rank of them out of existence. So completely were they taken by surprise that every one of the force was killed before any harm could be done.

Malben would have gone out and rayed the other domes to divert attention from his doings had he not been afraid to leave the generator unguarded. When a group of Karkorians came out of the third dome and dropped below the vegetation, he was content to spring upon the wall and pick off their red flitting shapes one by one with his pellet-gun. When at last a ray cut through the metal-work below him, and he crashed to earth, half buried under the wreckage, he was hardly sorry. He could see the enormously swelled Tandal apparently falling upon the other globe, and he was glad to be spared the horrible death which every living thing upon Karkor would so soon experience.

He was dying now, but by his death the whole universe was freed of the Karkorian threat. He could die with his mind at ease—the score was paid.

THE END.

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Science Questions and Answers

THIS department is conducted for the benefit of readers who have pertinent queries on modern scientific discoveries and on established scientific facts. As space is limited we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical, also to print answers as soon as we receive questions. However, questions of general interest will receive careful attention. If you desire individual answers to your queries, enclose 25c in postage to cover time and mailing.

Can Man Exist on Mars?

Editor, Science Questions and Answers:

Will you kindly answer the following questions?

1. Is it possible for an earth man to exist on the planet Mars?

2. Why does Mars glow with a reddish color?

Morris Miller,
561 Hendrix Street,
Brooklyn, N. Y

(1. In order for a human being from the earth to exist on the planet Mars we must examine the life-supporting properties of the planet. The temperature of Mars even at the equator hovers around or something below the zero mark. This would allow a human being to exist but in discomfort. Its atmosphere has about 5 per cent. of the water vapor and 15 per cent. of the oxygen that the earth has at its surface. Here, it is questionable whether a human being could exist. The oxygen of Mars' atmosphere is roughly comparable to that found about nine miles above the earth's surface. And it has been found that seven miles above the surface one becomes unconscious.

Naturally the lack of pressure of the Martian atmosphere would also be quite harmful inasmuch as our bodies are accustomed to a pressure of 14.7 pounds per square inch and the atmospheric pressure on Mars is doubtlessly much smaller. Some sort of diving suit to protect one against the lack of pressure and to supply oxygen would be necessary.

With regard to the providing of food, etc., we have no exact data. Vegetation doubtlessly abounds but whether it is of the variety to support human life, no one knows. The gravitational force on the surface of Mars, being about a third that of the earth, would cause no great discomfort, and the fact that the seasons and day and night on Mars are quite similar to those on the earth, would be helpful to human life. All in all one might say that life without accessory equipment might be barely possible, but not much more than that

2. Astronomers have not yet determined with certainty the reason for the reddish glow of Mars. There are two major or apparent possibilities. The first is that red is the color of the land on it—the surface may be composed of some reddish material The second possibility is that the atmosphere contains some gas that absorbs all but red light, thus reflecting light waves of only that color. Perhaps with the new 200-inch telescope we will be enabled to determine more accurately this and some of the other secrets of the cosmos.—Editor.)

Would the Bullet Hit Him?

Editor, Science Questions and Answers

Would you answer the following question?

Two trains on the same track are twenty feet apart and traveling at sixty miles an hour. A man standing at the front of the rear train has a rifle that shoots bullets which have a speed of sixty miles an hour and he shoots at a man standing on the rear of the first train. Would the bullet hit him?

Philip Radwelsky,
713 Rockaway Avenue,
New York, N. Y

(Inasmuch as the two trains are traveling at the same speed they may be considered as motionless with regard to each other, or they may be considered as one train. Therefore, we have a man on a train shooting at another man on the same train Now the rifle and the bullet in it have already a speed, relative to the ground, of sixty miles an hour. When a bullet is fired in the same direction as the train is moving it would have a speed of 120 miles an hour relative to the ground. And since the train is moving sixty miles an hour relative to the ground, the bullet would catch up with the first man and hit him, traveling sixty miles an hour with reference to him.—Editor.)

Our Rotating Galaxy

Editor, Science Questions and Answers:

Will you kindly answer the following questions in your columns?

1. Why do not the protons in the nucleus of an atom attract each other and crash as stars do?

2. What is the size of the galaxy of which our earth is a part? How long does it take to rotate completely on its axis?

Stanley Bowes,
67 Pratt Street,
Rouses Point, N. Y.

(1. We do not quite understand our correspondent's question. The nucleus of an atom consists of protons [positively charged particles] and electrons [negatively charged particles] all closely packed together, so that in reality there is little space between them. The difference between the number of protons and the number of electrons in the nucleus just balances the number of electrons revolving about the nucleus. Thus helium has two free electrons totalling two negative charges revolving about the nucleus. The nucleus consists of four positive protons and two negative electrons, the difference being therefore two positive charges to balance the negative charges of the two free electrons.

2. Our galaxy of stars has a diameter of about 200,000 light years, our own solar system being just outside of the center of it. The whole galaxy is supposed to make one complete revolution on its axis in 300,000,000 years.—Editor.)

Travel Above the Atmosphere

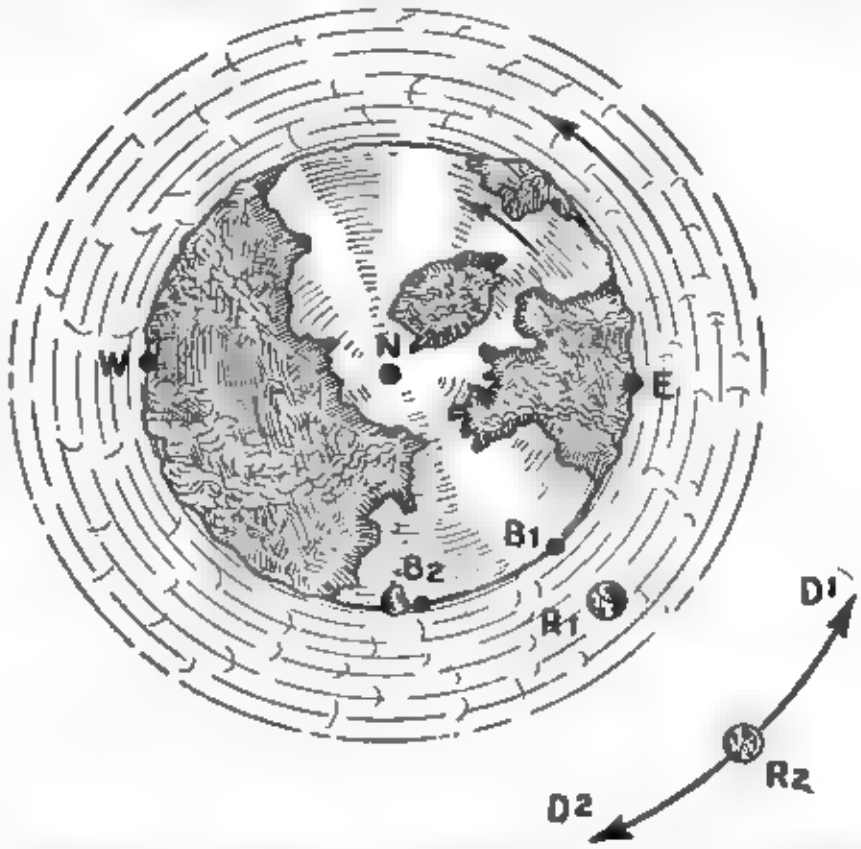
Editor, Science Questions and Answers:

If one got above the earth's atmosphere and traveled at 1,000 miles an hour in a westerly direction, would he not be traveling at 2,000 miles an hour because the earth's speed is also 1,000 miles an hour about its axis? If he went eastward would he not be apparently standing still over the same spot from which he started?

I would appreciate your comments on this.

Carl O. Okerblom,
439 E. Pine Street,
Ironwood, Mich.

(The accompanying diagram will make clear the interesting situation that would arise when a ship gets above the atmosphere. We are looking down on the north pole of the earth and it is rotating in the direction of the arrow. The atmosphere rotates with it, as though it were a solid part of the earth. There are six possibilities to consider. The first three deal with a ship inside the atmosphere. Now if a ship were within the atmosphere and remained in the air without applying any power, it would hang over the same spot B1 that it rose from. If it applied power in an easterly direction at the rate of 1,000 miles an hour, its speed relative to B1 would be 1,000 miles an hour east; and if it applied power in a westerly direction at the rate of 1,000 miles an hour, its speed relative to B1 would be 1,000 miles an hour west. The situation here is analogous to a man walking through a moving train. The atmosphere in this case is the train.



Showing the relative motion of an airplane inside and outside the atmosphere. N is the North pole; E is East and W is West. R1 is the rocket within the atmosphere and R2 shows it outside the atmosphere.

If now the rocket ship rose above the atmosphere to position R2 [and disregarding the earth's motion in its orbit] if no power were applied except to keep the rocket from falling, it would have a speed relative to B1 of 1,000 miles in a westerly direction. For one hour after the rocket reached its position, point B2 which is 1,000 miles west of B1 would be directly beneath the rocket. If the ship, however, applied power to shoot it in the direction marked by the arrow D2, its speed relative to B1 would be 2,000 miles an hour. And if it applied power in the direction D1 its speed relative to B1 would be zero, equivalent to remaining motionless within the atmosphere.—Editor.)

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary, critical, or whether it contains a good old fashioned brick bat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 25c in stamps to cover time and postage is remitted.

A Challenge to Men

Editor, WONDER STORIES:

This is the first time that I have ever written to the editor of any magazine. Truthfully, I am at a total loss as to what my next few lines shall contain. I'm only a girl—scarcely sixteen years of age—and probably at this moment I should be helping my mother with the evening housework instead of trying to foolishly express my ideas when I can't.

But why not? I have read other girls' ideas so I'm going to try, in one way or another, to make myself sound intelligent. I have momentarily laid aside my issue of WONDER STORIES and for a few words, shall let you have what some readers term as "Bouquets," pronounced "boo-kay" and defined as a "Nosegay or an aroma characteristic of some wines" by Webster.

First, you may ask, what business has a little girl reading a publication in which men are dominant? I answer you: Because science fiction is the only stuff that permits the reader's mind to run amuck, and at the same time know what he is reading. Science fiction is not a single phase or incident in a series of phantasmagorical orgies which the writer undergoes in writing his bunk. No, the only difference there is though, is that there exists a backbone of understanding along the plot of the narrative which puts a little sense into it. All the rest is purely what the modern American calls very audibly—baloney!

If that isn't expressing myself, listen to this and possibly you shall understand my viewpoint.

I am absolutely free in relation to your magazine. I am under no obligations whatever, and I'm going to express myself as I choose. You have absolutely no way of barring me from your magazine, and whether you like it or not, I'll keep buying and reading them until either my mother spanks me or won't give me any more quarters. Consequently you must bear reading—if the waste basket is not too distant—this little idea of mine.

Where do you get that stuff—MYSTERY—ADVENTURE—ROMANCE? What do we live for? Do we live to read such senseless trash as some writers create—old mummified scientists living in god-forsaken areas and who invent some bunk that will toss the world off its axis? Going a step farther—ants twenty feet long! Big steam shovels or something of the kind that come from Venus and eat up all the dirt on the Earth (in the September issue). Where do you see anything that resembles romance? How can your authors possibly imagine such horrifying contraptions and consume "Atoms and Molecules and gravitational-something-or-other?

Why do they write of such inhuman monstrosities? Why do they conceive of so many different ways of making a kill? My gosh! This Earth is either going to have a violent toothache or is sometime going to have a wreck with the sun. What chance has any one with big-headed fellows that come down in space ships from some other planet and "Annihilate" the Earth?

What do I care how some one is going to go to the moon now or when the sun falls? What I'm interested in and crave to occupy my interest is what adventure he goes through after he gets there. What kick do you get out of reading a lot of numbers? We want the description. The emotions the character goes through.

Why does every one go to other places with rockets? I hear the same thing over and over again. Almost every device there could be upon a space ship has been described and re-described until the reader knows every thing by heart.

Instead of publishing stories with a scientific backbone, you publish articles with the slight aroma of a story prevailing so insignificantly through it. We are buying with money that in some instances has been hard worked for. The man comes home in the evening from work to rest his soul in a refreshing hour of enjoyment, not to wade through incomprehensible figures. You wonder how some people throw bricks at you and tell each other that the magazine with the flashing cover is nothing but an oversized two bits worth of rot.

What sense would a girl like my self find in reading—say for instance the May issue—for the first time? None. Where do I find a trace of anything resembling adventure in the pages. Well, I admit there are a few possible places. But how about mystery—and last of all—what we live for—Romance?

Where do all these hypocrites who don't want a woman in the story think they belong?

Imagine the stubbornness of some—literally eating ants and spiders twenty feet long and refusing to acknowledge a story with at least a little romance in it. The story I refer to is one about someone named "Naomi" by a Mac—Something or other. (Our correspondent refers to "The Marble Virgin," by Kenne MacDowd, published in the June 1929 issue of SCIENCE WONDER STORIES.—*Editor.*)

Why doesn't that fellow Keller try to see the beauties of life? What enjoyment would you get out of people with heads as big as their bodies?

ON LETTERS

BECAUSE of the large number of letters we receive, we find it physically impossible to print them all in full. May we request our correspondents, therefore, to make their letters as brief and to the point as they can, as this will aid in their selection for publication? Whenever possible, we will print the letter in full; but in some cases, when lack of space prohibits publishing the complete letter, we will give a résumé of it in a single paragraph.

After all, it is only your fault for demanding such intense science from your authors.

The drug store at the corner closes at twelve. It is eight now. I must get my copy of the June issue before my father gets home at 8.30—that is, if my mother will let me have the quarter. Give us more romance.

Carmen McCable
San Francisco, Cal.

(This is one of the most intelligent, sincere and well-thought out letters we have received. We are uneasely grateful to Miss McCable for her frank analysis of our stories. We are sure that she speaks for tens of thousands of people who are attracted to science fiction stories because of their imaginative appeal and their stupendous ideas—yet are repelled when a story is cold-blooded and lacks all trace of human feeling.

We have recognized that truth, and also the truth that a story does not make its proper impression until it touches the heart as well as the mind of the reader. When one speaks of a new scientific idea, or a great invention, the human impulse is to say, "How does this affect me, how is it going to change my life?"

This reader's answer can only come through adventures that concern human beings like himself. This however does not mean necessarily slushy adventures.

But Miss McCable throws down a challenge to many of the men who have decried romance in our stories. We would like to hear from some, giving us their point of view. In other words, should stories be about normal human beings encountering the wonders of science, and having their lives and loves affected—or should they be about super-men, geniuses and cool and calculating scientists only?—*Editor.*)

Science Correspondence Club Approves

Editor, Wonder Stories

I wish to thank you for your prompt answer to my letter in sending me the check which was my share in your recent QUARTERLY contest. I can assure you that it was welcome, and the Science Club will use it to good advantage.

While I am writing, I wish to comment on the new magazine evolved from the AIR WONDER STORIES and SCIENCE WONDER STORIES. In my opinion this was the wisest move you could possibly have made, as from my deductions as to public feeling as evinced by the members of the S. C. C., the former magazine was not as popular as WONDER STORIES, on account of the monotony of air stories exclusively. You know, variety is the spice of life, and after all, what the modern reader wants is lots of pepper from the peak to the pit. Man's imagination ever flutters from high to low and back again. Never does imagination run on a smooth track, nor does it work hard to gain an end. It is brilliant and flashes from one subject to another and is off as soon as can be, to different things. Therefore, WONDER STORIES is due to attain great popularity. At least, the S. C. C. is sworn to it.

Raymond A. Palmer,
Secy. Science Correspondence Club,
1431 Thirty-eighth St.,
Milwaukee, Wisc.

(We are very happy to receive this stamp of approval on WONDER STORIES by the Science Correspondence Club. Their hundreds of members drawn from the more intelligent reading group, and located in all parts of the country, form for us a good index of the feelings of our readers. Mr. Palmer strikes exactly the right note when he speaks of the necessity for variety in imagination. In WONDER STORIES where we can offer the best of aviation science fiction as well as the best in general science fiction every month we have determined to provide that spice of variety. The June and July issues, we hope, indicate that.

Mr. Palmer's "Time Ray of Jandra" seems to have met with general approval from our readers and we look forward to the next of this talented author's brain children.—*Editor.*)

A Plea for Social Justice

Editor, WONDER STORIES

WONDER STORIES contain many interesting features of science dealing with remarkable discoveries and inventions, but in spite of this one cannot help but wonder just in what way all these wonderful new inventions could serve mankind if they could be realized.

We have many remarkable inventions of today that are of almost superhuman intelligence which have thereby replaced millions of skilled and unskilled people, with more and more of these machines being added daily which in turn will replace many more working men.

The entire world faces a very grave crisis as the natural result of being unable under this great competitive system to supply these forces of unemployed with useful labor. As a very natural result of this situation we find crime, vice and poverty on a vast increase with the

(*Continued on page 278*)

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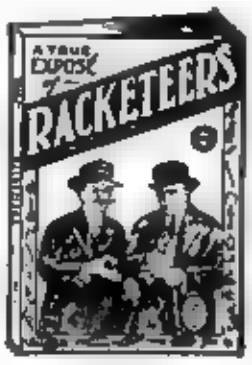

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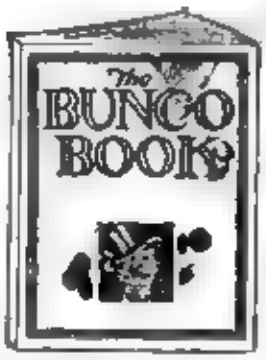

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ANDREW TRAVERS

P. O. Box 384 Grand Central Station New York, N. Y.

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A SULTRY NIGHT. In Boston's harbor there showed but a dim silhouette of steeples, warehouses, and feathery lacework of spars of this great town. An immigrant boy, starved and penniless, crept from the steerage hold to the deck and dropped into the murky waters of Boston Harbor. He swam ashore to a new life of adventure, hardships and trials in a strange land. . . . Such is the story of Joseph Pulitzer, publisher of the New York World.

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THE READER SPEAKS

(*Continued from page 276*)

prisons of this country full to their capacity in spite of the fact that they have been greatly enlarged. Competitive industrial leaders state the labor saving machinery and methods are necessary to their existence. Common sense tells us the system must be altered and at once that humanity in general may reap the benefits of these great forces of production, distribution, and communication.

The entire civilized world faces the problem of solving the question of social justice. Are we as civilized beings to solve this question by educating the masses to act in a constructive manner or are the leaders of public opinion going to continue to feed the people lies of "temporary business slump, a stock juggling proposition, or prosperity is coming," bunk and let the opportunity slip past and have the masses act in a destructive way.

New and wonderful inventions are only of benefit to the human race when it is educated to use such inventions in a beneficial way, and for the good of humanity in general, instead of for the benefit of a few to the general detriment of the many.

As a molder of public opinion you can and should take part in this fight for social justice. The great social destructive forces are as malignant as many depicted in your science fiction stories but of a real up-to-date nature. The facts of the existence of the situation cannot be evaded nor can the solution of the problem be left to chance or to humanitarian action on the part of the industrial leaders. Even in fiction you can point the way to your readers. I with others await with interest the disposition made of this letter, and only hope that you align yourself on the side of honesty and social justice. At least I am entitled to a hearing in "The Reader Speaks."

W. R. Spangle,
Room 6, Rowe Bldg.,
Elkhart, Ind.

(As we have consistently stated, we are not propagandists of any kind—except for the general betterment of the human race. And for that betterment, we agree that social justice is necessary. We have never laid restrictions on the social or political or economic ideas in our stories, nor do we dictate what they should be. Therefore many of our stories have been very critical of our modern life, and in our stories we see modern inventions turning like Frankensteins on their creators. Our authors have meant to show by this, that science is dangerous unless we can use its products wisely.

We do not pretend that this world is the best possible world and that everything is all right under the sun. Therefore we are always happy to print stories that can point out what is wrong with us, and what we can do to better ourselves.—*Editor.*)

Interplanetary Travel Closer

Editor, WONDER STORIES:

I want to tell you about the gratifying growth of the American Interplanetary Society. In the past month we have added to our membership a fine group of men and women located in all parts of this country and have received requests for information from a number of foreign countries. There is much to be hopeful about in the reception the American people are according our attempts to bring the day closer when interplanetary travel will become a reality.

We have just embarked on two ambitious projects. The first is a campaign of research to determine all the available material known in every phase of interplanetary travel, and the second is the establishment of a monthly bulletin which will collate all the news of the Society and the news throughout the world relating to interplanetary travel.

Meanwhile the New York members are holding monthly meetings at the American Museum of Natural History where at each session a talk is delivered by one of the members on a phase of interplanetary travel. The digests of these talks will appear each month in the bulletin.

Active Membership is open at ten dollars per year or three dollars per quarter year to men and women who have a good basic knowledge of science and an understanding of the interplanetary problem. Associate membership at three dollars per year which entitles the member to all the privileges of the Society except a vote in its direction, is open generally to the public. The American people have now an opportunity to share in the promotion of what will be one of the greatest adventures ever attempted. Request for membership should be addressed to the Secretary.

C. P. Mason, Secretary,
American Interplanetary Society,
102 West 22nd Street,
New York.

(We print without comment this letter for the information of our readers. This Society deserves your most enthusiastic support.—*Editor.*)

An Answer to Mr. Peart

Editor, WONDER STORIES:

Just received the latest WONDER STORIES and read "The Reader Speaks." I particularly noticed a letter by Donald Peart. I would like to make some remarks about some of his objections.

First objection was that the stories were "fantastic and highly imaginative." Well I don't see why in the world he subscribed to this magazine if he doesn't like that type of story. Jules Verne, the first great science fiction writer, told of many things which were then "fantastic and highly imaginative." They are plain fact at the present day.

Second objection was that the stories were tripe. I wish he would please explain what he meant by the word tripe. He also made the statement that this magazine was no better than the average western story thriller.

Third objection was the money-making scheme. Well what does he think they print magazines for anyhow. Maybe he thinks they ought to play Santa Claus and give magazines away.

Fourth objection was the religion question which was answered to my satisfaction by Mr. Gernsback.

Fifth objection was cheap paper. Well this magazine uses about the best of this type of paper (pulp paper). I wish Mr. Peart would please compare the paper in the latest WONDER STORIES with the latest western thrillers.

Sixth objection was the science fiction week and its free advertisement. Well you got to admit the idea was original any how.

Twenty-five cents sez, Mr. Peart would read another one of these magazines if it was given to him.

Jack Rickett,
Grand Hotel,
Battle Creek, Mich.

(Mr. Rickett rises to the editor's defense. We think that we can print this letter without comment.—*Editor.*)

Such Are the Trials and Tribulations!

Editor, WONDER STORIES:

If you are not as yellow as some of your lurid covers, you'll print this letter—but I doubt it. Anyway, I'll have the satisfaction of voicing my opinion of the Gernsback magazines and their editors.

The merger of SCIENCE and AIR WONDER STORIES revealed you in your true colors. It was planned a year ago, when the two magazines were first established. After building up a group of followers for each magazine, you would combine them, thus increasing the circulation of the new periodical while decreasing the cost of publication. Very clever—but not very honest!

Then, six months ago, you inaugurated a slogan contest in each magazine. After conducting the contest for half a year, and arousing the interest of your readers, you cancel it by merging the magazines. What a flagrant swindle!

Even the announcements regarding the formation of the new magazine were fraudulent and dishonest. Readers of SCIENCE WONDER STORIES were told that only the name would be changed, readers of AIR WONDER STORIES were informed that the two publications would combine.

It is easy enough to see the reason for all this deceit and crookedness. Your magazines have proved dismal failures. They were being published at a loss. Facing bankruptcy again, you grasped at a last straw. Perhaps one poor magazine would be better than two rotten ones!

But the merger won't do you any good. Cheating and double-dealing never pay. You'll fail

(*Continued on page 279*)

THE READER SPEAKS

(Continued from page 278)

again.

No, I hardly expect you to print this. The truth hurts. But if you have any decency at all, you will at least try to vindicate yourself in the eyes of your readers.

Booth Cody,
Bronx, New York

(Here at last is a real brick-bat adorned with a number of spikes, slender and sharpened to a razor-edge.

It seems to prove the old adage that one-half of the world never knows what the other half is doing.

We are of course delighted to answer this vitriolic letter, although the correspondent gives no street address and we are not sure whether the signature is the correct name.

At any rate, these are the facts.

It costs on an average $10,000.00 to start a new magazine and get it going. If the magazine is discontinued, usually the publisher is out at least that much money. This is particularly true if the magazine is less than a year old. We know of no magazine that ever paid back its cost or investment to the publisher in its first year.

What our correspondent ignores is, in the case of SCIENCE WONDER STORIES and AIR WONDER STORIES, *practically 90 per cent of the circulation was duplicated.* In other words, where we hoped to get thousands *of "different" readers* from aviation enthusiasts, we found that this was not the case. In other words, practically every reader read both magazines.

Now when the recent financial upheaval occurred—the stock market crash followed by a severe business depression—literally thousands of readers wrote in to tell us that the burden of the two magazines, which, after all, were similar, was too much. It happened that readers would buy SCIENCE WONDER STORIES one month and AIR WONDER STORIES the next month. This naturally didn't help the readers and didn't help the publisher.

From this it will be seen that our correspondent is sadly mistaken in his belief that with "malice aforethought" we had built up a group of followers for each magazine only to combine them later.

The combination was made simply for the purpose of satisfying the majority of the readers who wanted both aviation and general wonder stories and who couldn't stand the burden of so many magazines.

Far from increasing the circulation by the combination, we doubt at this time that we have taken on more than one thousand new readers.

As to the slogan contests, again our correspondent must bear correction. He will have seen already in the July issue that an announcement was made of the decisions to appear in the present issue, where they will be found.

What our correspondent means when he says "the formation of the new magazine was fraudulent and dishonest" perhaps some clever scien-

(Continued on page 280)

IF you have not as yet seen the SUMMER WONDER STORIES QUARTERLY

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By R. H. Romans

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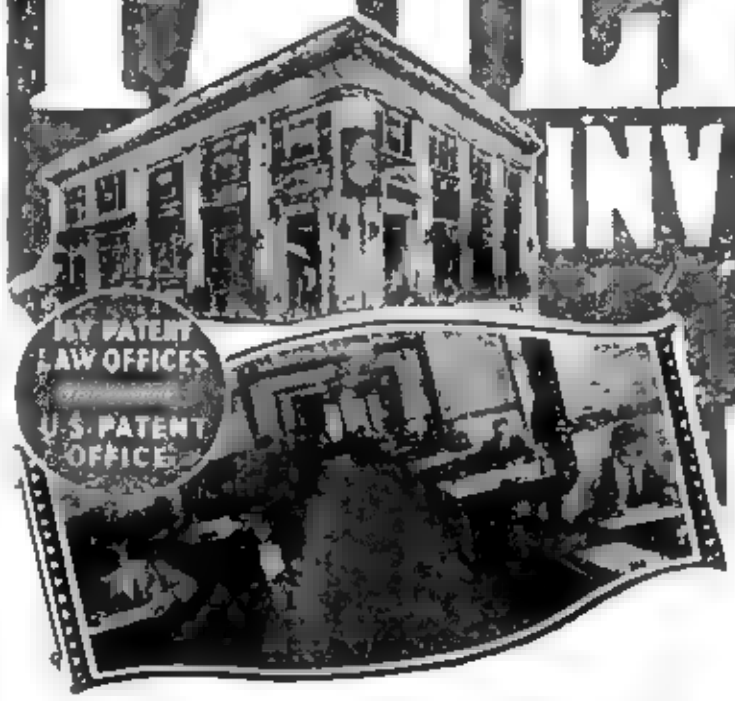

At the left is a view of my drafting and specification offices where a large staff of experienced experts is in my constant employ. All drawings and specifications are prepared in my offices.

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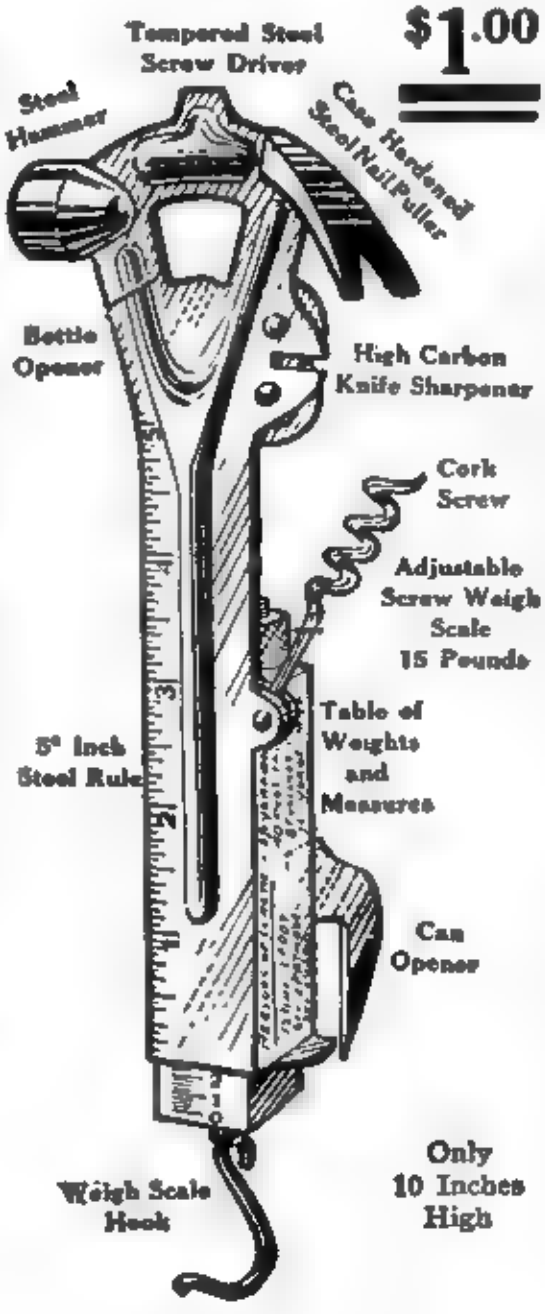

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THE READER SPEAKS

(Continued from page 279)

tist can explain. We do not understand the meaning.

Far from the magazines having proved dismal failures, they have shown a continuous growth since their inception.

Of course, one cannot expect the average man to know the publishing business and we do not blame anyone for not knowing it. But a lack of knowledge should breed discretion and we certainly do believe that Mr. Cody should vindicate himself by apologizing for some of his uncalled for language.

We, as publishers, have always been glad to take our readers into our confidence and we intend doing so regardless of what isolated individuals may think.

The publishing business is a most difficult and intricate one, and if the public understood only part of the difficulties of the publisher, perhaps they would buy a lot more magazines.—*Editor.*)

Amazing Detective Tales

A super-size book published every month, containing the best stories by the best authors in the detective field.

And the Editorial Commissioner is Arthur B. Reeve, the founder of the super-scientific detective.

Here is just a glimpse of the August issue—on sale at all newsstands July 15th:

THE SCIENTIFIC CRACKSMAN, by Arthur B. Reeve. Another astonishing Craig Kennedy adventure.

VAPORS OF DEATH, by Edwin Balmer and William B. McHarg. Here is a story by these well-known authors that includes half a dozen sciences, solves the mystery of one murder and by the keen deductions of Luther Trant prevents another.

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ON ALL NEWSSTANDS JULY 15

On Occultism and Others

Editor, WONDER STORIES

I wish to compliment you on the sense shown in publishing a story like "After 5,000 Years" in the July issue.

Perhaps you remember Charles Steinmetz's last word: "The greatest scientific progress in the future will be in things spirit," or something of that meaning. As a student of things "Occult," meaning the study of things which are beyond our ordinary five senses I specially enjoyed the story as a perfect hypothetical example how the laws of, as Hindu lore calls them, Reincarnation and Karma work.

I much enjoyed Donald Peart's letter in which he says, "I will never read your magazine again," in the July issue. Let's go over it.

1. The stories HAVE to be fantastic, for the truth about the future is so fantastic that, if revealed to him would send him nuts.

2. More than 90 per cent. of the people are just plain "Tripe," so you the publishers are still above the average.

3. Donald Peart probably is a Dime-giving Rockefeller.

4. As his view does not go farther back than Galileo, he can't be blamed for his view. To all the really great minds Religion and Science

(Continued on page 281)

THE READER SPEAKS

(Continued from page 280)

blend into one Harmony. But as his mind is so much greater than the minds of all the great savants of all time, he can't be blamed of making the same mistake than the Eskimos who blame the static and the burnt out tubes on the orchestra they hear over the radio. The churches are an instrument for the propagation of the old divine lore. If the instrument is worn out, the product will be distorted.

5. Everybody with the slightest insight will understand your struggle to keep above water.

6. The same is done by almost every magazine, so why kick. About two years ago your policy in your previous magazines was strictly hostile to everything savoring of the occult. I am glad to note that your policy has gradually changed. Let me assure you that there is no more fascinating and engrossing study than the occult, specially for the trained thinker and scientist. If he keeps an open mind and is not scared off by the jungle of charlatanism that has grown around it. By the way, I miss an occultist amongst your staff of expert consultants. It would prevent a lot of nonsense about further dimensions, time and space relations, state of other planets, future civilizations and occult things from getting into press. Since you ask for comments to Mr. Osolsky's letter I'll give you an occultist's explanation. "The human body uses a life energy, distributed by the sun, for all its actions and has a certain capacity for storage. In sleep consumption is at its minimum and accumulation at its maximum. So a short nap will store only very little. In stress, the body draws on its reserves. This force can be seen as a rosy stream passing through the nerves. One part may have exhausted its quota, which explains being tired through one sort of occupation and still perfectly fresh to another stimulus. This force is the breath of God, alluded to in the Bible and other scriptures, which is the life force of everything alive."

Frederick G. Hehr,
Jerusalem Ave.,
Hempstead, L. I.
R. R. No. 1

(Our only comment, from twenty years of editorial experience, is that we can't please everyone. For if we try, as in the fable of the two men and the donkey, we will end by throwing the donkey into the river. Every publisher receives letters of terrible condemnation and is utterly damned by certain readers for this policy or that. We understood that when we received Mr. Peart's letter and Mr. Booth's which is printed in this issue. But we can't give up trying to convert those who have strayed from the fold.

Webster gives in his dictionary the definition of the word "occult" as "That which is not immediately known; perceivable only by investigation." If such is the case we must plead guilty to having stimulating occultism. For what was occult to the people of the sixteenth century was a commonplace truth to those of the seventeenth, and what was occult to the best minds of the nineteenth century is part of the scientific knowledge of the schoolboy of the present day. It is our aim, in fact one of our most important aims, to stimulate where we can, investigation of every branch of science. And the true scientist is not frightened by words such as "occult."

Regarding "After 5,000 Years," we do not pretend like Mr. Hehr to know the explanation of the dream in which a man of the present day dreams that he sees events occurring which really occurred 5,000 years ago. We feel that our author did not mean to place any explanation on it. It's just one of those things for which science can as yet furnish no clue. We invite our readers' opinions on it, however.

Inasmuch, by our definition, "occultism" is a study of all things that are beyond our perception, we do not see that a special consultant is necessary for it. However, we appreciate Mr. Hehr's calling it to our attention.—*Editor.*)

Lawyers and Interplanetary Flying

Editor, WONDER STORIES

By writing this letter I am breaking a silence that I have kept since the first issue that you ever printed which was, I forget how long ago! I have often been tempted to write and tell how I enjoy "our" magazine, but there have always been others who have done it better. But there is one point which none of your readers have brought up. Supposing a space flyer were ready to start tomorrow, I am quite confident that it would be many years before it left the ground. The people who would hold it back would be the lawyers! The generally accepted type of space flyer is that which has several false tails containing the propelling fluid and which are dropped as they are emptied. Remember that word, "dropped," and then picture a crowded city street below it. Also there is the possibility of the flyer going up a distance and then falling! The first picture still holds good.

I am heartily in favor of space flying but believe there are many legal as well as technical tangles to be unsnarled. Wish you would advise via your columns on this.

John Conroy,
3216 Clifton Ave.,
Chicago, Ill.

(The difficulty of disposing of the discharged rockets in a rocket flight is one that has bothered proponents of space flying. The possibility of a rocket ship falling on a city, however, is quite remote. A rocket ship would be equipped with wings just as an airplane is and would be able from any height from which it might fall to glide down to almost any desired plane should an accident overtake it.

The disposing of discharged rockets may be done in two ways. In the first place, some of the rockets will be discharged a hundred or two hundred miles above the earth when the rocket is traveling at speeds approximating five miles a second. Now if a portion of the rocket were discharged it would probably have a speed sufficient to make it a permanent satellite around the earth.

The second means of disposing of the cast-off portion is to have within it a violent explosive which will shatter it to bits after it has been cast off.

We must remember that every day the earth is being hit by hundreds of thousands of meteoric particles, and we know little about them. The chances of one hitting a city is so remote that we are not seriously concerned. But just as science is making great progress toward the development of an interplanetary flyer so it will find means to safeguard the earth when interplanetary flying comes.—*Editor.*)

Accepted Gratefully

Editor, WONDER STORIES,

In appreciation of what you have done for the Science Correspondence Club, and for Science Fiction, the S. Lynn Rhorer Society of Greater Atlanta will deem it an honor to have you associate with us as an Honorary Member.

We will appreciate it very much if you will give us space in your columns so that your readers in Atlanta and adjacent territory will learn of this Society. This we feel sure you will gladly do, as it is for the furtherance of science and science fiction.

We now number twenty members.

We trust that you will honor us by acceptance.

Anyone interested can obtain information by addressing, R. A. Marks, Jr., President, 893 York Ave., S. W., Atlanta, Ga., or the writer.

J. B. Eason, Secretary,
S. Lynn Rhorer Society
East Point, Ga.

(The editor has accepted with gratitude his election as honorary member of this Society. He wishes well all efforts to spread an interest in science and science fiction, and extends his heartiest congratulations on the good work the S. Lynn Rhorer Society has done so far.—*Editor.*)

Knowledge Comes After Thought

Editor WONDER STORIES

I am an interested reader of your publications and the only fault I find is that they don't come often enough. I would prefer weekly editions and presume many other readers would also.

Nearly all of your stories are in one class—A1. Some are not quite as good while others are not as bad as some of your readers seem to think.

Some of the meanings in them are rather

(Continued on page 282)

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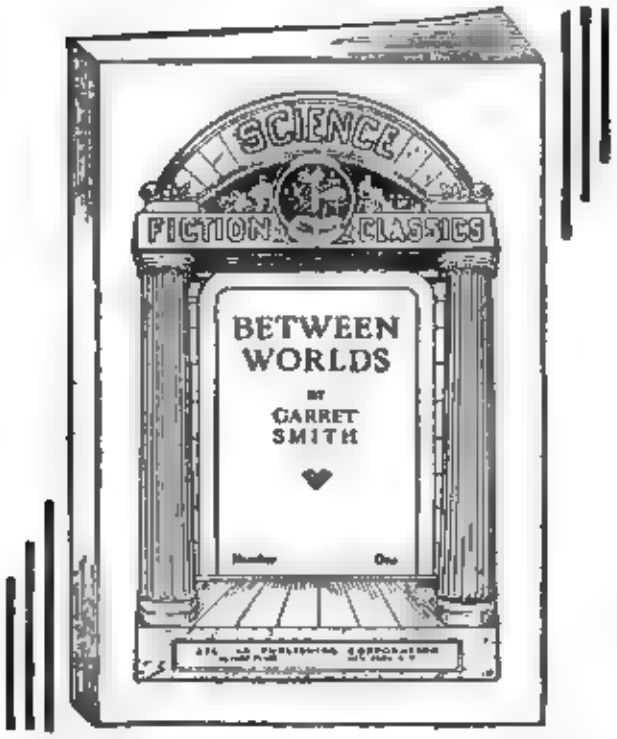

From several of the oldest of interplanetary classics have been selected numerous stories which for many years have been out of print. So that readers of WONDER STORIES may enjoy the privilege of reading these interesting and educational stories at a very small cost, a few of the best are being reprinted in book form—the first of which is BETWEEN WORLDS by Garret Smith. This book is printed on an excellent grade of paper, stiff covers and is of standard book size—nearly 100 pages. They are now ready for mailing, and sell at

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Rarely does an interplanetary story cover such a wide field of romance, mystery and thrilling adventures as is found in this masterpiece of science fiction. Starting on mysterious Venus shut away from the world by its layers of clouds, we find a tremendous drama of exploration of unknown lands, great conflicts of alien races, social revolutions and finally a breath-taking trip to the Earth, where our Venusians take part in the making of Earth history.

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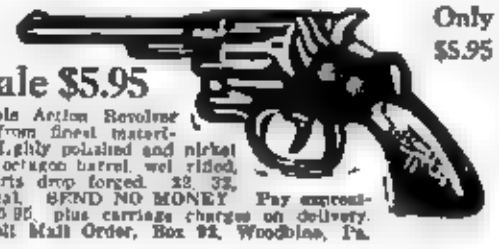

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THE READER SPEAKS

(*Continued from page 281*)

obscure and hard to understand, which in itself is very good as it tends to stimulate the thinking apparatus of the reader, and it's certain that knowledge comes after thought.

Lets have stories of all kinds of ideas that your authors can imagine.

I wish, however to suggest to some of the readers who are so free with criticism and sarcastic moments about some of the stories. Just try writing a story, and if you can improve over the stories published in these magazines, I and many other readers would admit that you have a right to kick. And if you can't improve then maybe you will get the idea that a kind word and helpful suggestion are preferable to sarcastic comments, kicks, growls and knocks.

I believe that the authors who write the stories do their best so let's all encourage them to keep on writing better and better stories. And though they make a few errors and mistakes—what of it?

I believe that science fiction is doing more to advance education than any other type of publication. So a long life and continued growth to our guide to greater knowledge.

H. Cecil Johnson,
General Delivery, Fresno, Cal.

(Mr. Johnson gives us some excellent thoughts to ponder over. Criticism, as he says, if it is not helpful is meaningless. In other words one says, "this story is no good." His friend asks "Why?" The critic then searches in his mind for a reason and discovers the flaw or fault. He knows it is a flaw or fault because the flaw is illogical or unreasonable or what not. The critic must, if he thinks enough, be able then to discover what would have been reasonable or logical or interesting in the story. However we are always open to criticism, helpful or not.—*Editor*.)

The Library Group Speaks

Editor, WONDER STORIES

Our library group did not mind the change of name in SCIENCE WONDER STORIES, but we did mind the combination of AIR WONDER STORIES with SCIENCE WONDER STORIES. AIR WONDER STORIES was in a class by itself but for its authors. There were too many new and too few old. An example of too much of one new author is Ed Earl Repp. I find nothing in his stories. I'm sure you'll admit an old timer like Harl Vincent has him beat to pieces. At least our crowd *knows* he has. And still you publish so little by him and other good authors.

We want to know what some of your readers see in D. H. Keller. I and our group agree that D. H. Keller should not even be called a writer. Why? We maintain that any man who makes such monstrous mistakes in his stories as D. H. Keller did continually in his stories "The Feminine Metamorphosis," "The Conquerors," "The Human Termites," "The Evening Star."

1. "The Feminine Metamorphosis." The women would not kill the men because they knew that without men, how could life be carried on?

2. "The Human Termites." The termites could never have gotten ascendancy over man as they did because man could easily have killed them with his bombs, gas and guns.

3. "The Conquerors." Brunton must have forgotten that there are several very slow working poisons that can not be detected in their working. And if Brunton was as smart as Dr. Keller had him be he could easily have manufactured one of these poisons.

4. "The Evening Star." See No. 3.

After that proof won't you be broadminded enough to admit that we are right? How can your readers call him a good author when he makes such mistakes? Please give me a reply in "The Reader Speaks." Have they forgotten Harl Vincent and Francis Flagg? It seems to anyway. Harl Vincent is our unanimous favorite.

We did not care for the first issue of WONDER STORIES at all. Why?

1. We do not like the idea of two serials in a magazine of this type. One is plenty, in fact we believe there should be none at all in WONDER STORIES.

2. In AIR WONDER STORIES it was said that "The Bat-Men of Mars" was to be in two parts, yet in WONDER STORIES it says three parts.

(*Continued on page 283*)

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THE READER SPEAKS

(Continued from page 282)

Why is that? Is certainly wasn't a misprint.

3. Besides what you had you also said you were going to have "The Annihilator Comes," "The Martian Revenge," "The Torpedo Terror," "Byrd-Lindbergh Prize Contest," and "The February Cover Contest." Well, where are they? And when do we get them? They're not predicted for the next issue.

4. You said WONDER STORIES was going to be bigger and better than either SCIENCE WONDER STORIES or AIR WONDER STORIES. Instead it is smaller and worse than either of the others were. If this keeps up you will have about thirty readers less than you have now. We did not at all like the larger print and increase in advertisements instead of pages. In fact there was a decrease of five pages in our reading matter besides the decrease on account of larger print. What's the idea anyway?

Will you please publish this? You know you say you publish brickbats. Besides we would like to see some of your "Dr. Keller mad" readers set straight in their views.

Gabriel Kirschner,
Sec. High School Library Group,
Box 501, Temple, Texas.

(We can well appreciate the questions that come to the minds of the library group of Temple, Texas. But before we answer them, we want to commend this group for the excellence of their idea. There is no better way to promote the interest and knowledge of individuals by ways of books than to get together to discuss them and change mutual information. We wish it all success.

In the first place, there are admittedly errors in Dr. Keller's stories. There are probably errors of one kind or another in all stories. The man who imagines a new world, a new civilization and new conditions, and has everything perfectly consistent and truthful would have to have the brain and the all-seeing eye of a Deity. So we must be tolerant, and after we have seen the mistakes we ask: "How important are they, and overlooking them what does the author give us?"

It is inevitable that there should be mistakes in Dr. Keller's stories, for his conceptions are so vast, and he departs so far from the commonplace, that as we have said it is only human to expect mistakes. However we are grateful for having these matters called to our attention, and we invite comments from readers who do not agree with us or with the Temple Library Group.

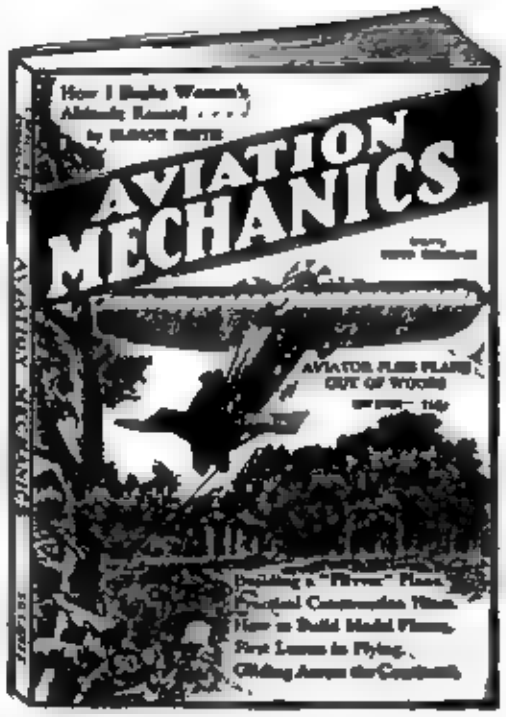
With regard to the second group of comments, we must ask the library group to be patient. The inclusion of two serials in an issue, the change in the "Bat-Men of Mars" and the change in the schedule for "Next Month" were merely the readjustments necessary in the combination of the two magazines. In this issue, the readjustment is practically complete and we anticipate no difficulty from now on. We ask for the loyalty of this splendid library group, the kind of loyalty that can look ahead and know that it will be justified. However, we are very happy to hear from them at any time.—*Editor.*)

Why Isn't It Invented?

Editor, WONDER STORIES:

Last Saturday, quite by accident I bought the February Edition of the S. W. S. in Woolworth's. (That seems the only way to get them in England) and was amazed at the contents. It was the book I had been looking for ever since I read H. G. Wells' "Time Machine." I think your stories are fine and get right away from the nauseating atmosphere of American "gats," "plugs," "rides" and "rackets" that have flooded the fiction market here from time immemorial. Your stories are all marvelous flights of fancy and theory and practically every invention in the book, after being described, makes you say, "Why on earth isn't it already invented," they are so feasible. I really cannot praise it enough, but—there is a thorn in every rose. Why publish two-part stories? I have just read the first part of the "Rescue from Jupiter" and it is a hundred to one chance that I shall ever be able to get the other part of it. Is there any chance of ever seeing your QUARTERLY Magazine over here? I should like to, it must be fine reading. I work away from home and so find plenty of time for reading and writing so I wonder if you could put me

(Continued on page 284)



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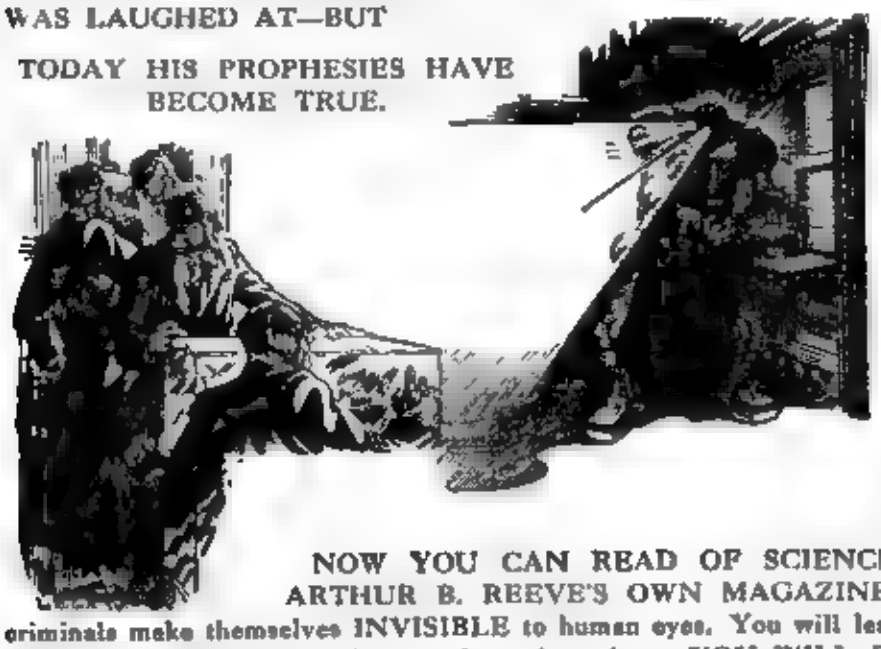

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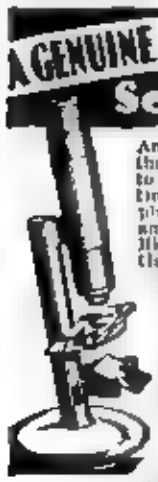

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THE READER SPEAKS

(*Continued from page 283*)

on a good writing pal to exchange correspondence with. I am eighteen years old and interested in photography and constructional engineering. Wishing your "mag" every success I wait your answer,

V. P. Hart,
Providence Cottages,
Guildford Road,
Bagshot, Surrey, England.

(We believe that Mr. Hart will find by this time that he can get his copy of WONDER STORIES regularly as we have made arrangements with Hachette & Cie., 16-17 William Street, Charing Cross, London, W. C. 2 for their distribution in England. We believe that among our thousands of readers Mr. Hart will find a number of young Americans who read this letter who will be happy to correspond with him. It is good for us to hear such cheery words from our cousins across the sea.—*Editor.*)

The Scienceers Succeeding

Editor, WONDER STORIES

I am a firm believer in the message that WONDER STORIES is giving to the world. I have backed up this belief by subscribing to the magazine.

The first issue of the new WONDER STORIES was very good. It verified all your predictions about it. Of the stories "The Incredible Monstrosity" was the best by a large margin. "Trapped in the Depths" took the booby prize by a mile. It was terrible. I am surprised that you printed it.

I am glad that you are continuing "The Bat Men of Mars" from AIR WONDER STORIES. It sure is a great story. It has the high WONDER STORY quality and there is none higher. Speaking about AIR WONDER STORIES how about printing the Cover Contest Stories. I sure am waiting for it.

The new Trans-Neptunian Planet offers a dandy field for science fiction. Why not use it?

The *Scienceers* of which I am a member are getting along great. New members are coming in thanks to our letters in your magazines. Every mother's son of us is a backer of WONDER STORIES.

Herbert Smith,
20 East 179th St.,
Bronx, New York.

(By this time our readers will have seen the most excellent prize winning story from the AIR WONDER STORIES cover contest. We would like the comments of our readers on it.

Several stories on a new planet in the solar system (named Pluto now) have already come to us and an announcement about one will be forthcoming soon. We are anxious to get the best one available.

We are very happy to hear of the success of the *Scienceers*. The enthusiasm and energy of this group of young men are marks of the growing popularity of their club. The only advice we offer is to get definite aims to accomplish. For the field of science is so large, that there is an ever-present danger of dissipating their energies and accomplishing nothing.—*Editor.*)

Tearing It Apart

Editor, WONDER STORIES

This is my first attempt to write to "The Reader Speaks" Department, although I have read all of the issues of "our" magazine. My reasons for this attempt are

First, in your explanation of the structure of an atom of gold, you have 78 dots representing electrons, I presume, although in truth they (electrons) must not be considered as compact material things, but are as vague and filling as—well, fear. However, we must make use of dots to get a working basis. Now, you have 78 dots where there should be 79. Also, the number of electronic orbits in the M, N and O rings are incorrect. From K outward the electronic orbits run: 2, 8, 18, 18, 32 and 1.

Second, as to "Waves of Death," I would like to raise a point of discussion. Why did not Dr. Smith hear the noise of the *Dart's* motor when he was aboard his friend's yacht? Sound originating from the cylinders would travel in all directions, not just forward with the *Dart*. The author, Wesley Arnold, states, himself, that the farther from the source of sound, the less intense it becomes. Since this be so it is not fair to simply add up the num-

(*Continued on page 285*)

THE READER SPEAKS

(*Continued from page 284*)

ber of explosions per second and say that these waves accumulate. The sound waves produced at a point A will be much less intense at point B, 1090 feet from A and at point C, 2180 feet from A will be still more decreased. Also, as sound travels in straight lines, when the *Dart* rounded the pylon and resumed a straight course, a new series or accumulation of waves must start from the beginning. However, as the "explosion" occurred at half-way of the straight away, the theory has somewhat a basis for survival.

Captain S. P. Meek's story "Trapped in the Depths" is the next to receive my attack. Perhaps, I have received the wrong impression but as I read the story, the Loon started its ascent when some of the oxygen of the air was "absorbed" by the pyrogallic acid. Of course, this is absurd as the total weight of the Loon remained the same. If, however, some of the oxygen of the air was replaced by a mixture of hydrogen and oxygen and that oxygen allowed to *escape from the Loon*, then the total weight will be decreased. Perhaps, this is what happened.

I have not read the other stories in the June issue as yet, so cannot give my opinion of them. However, you should not be so careless as to advertise on the cover that there is to be a story by Henrik Dahl Juve within, and then disappoint the reader by finding none.

In conclusion, I wish to tell you that I enjoy WONDER STORIES more than any other magazine and would not miss an issue "for the world." This may seem a strange thing to say after all the brick bats. However, my enjoyment comes in tearing a story apart and do some reasoning for myself, rather than read it as any fiction magazine which fills the newsstands today.

Gordon M. Dunning,
37½ East Court Street,
Cortland, New York.

(On recounting the number of dots representing the electrons of an atom of gold on page 77 of June WONDER STORIES we admit that our adding machine was in error and there should have been another dot. With regards to the orbits of the electrons, however, we quote Jeans from his "Universe Around Us," page 126. "There are two orbits in which the energy is lowest . . . after this come eight orbits of equal but substantially higher energy, then eighteen orbits of equal and still higher energy . . . these are designated as the K-ring, L-ring, M-ring etc."

Now there is an evident arithmetical progression in the numbers. Add 6 to 2 to get 8. Then add 10 (*six* plus four) to 8 to get 18. The next obvious step is to add 14 (*ten* plus four) to 18 to get 32. That gives us in the first four rings 2 plus 8 plus 18 plus 32 electrons totalling 60. There remains therefore 19 electrons for the next ring.

At the time the "Waves of Death" was read the editors questioned the author on the point our correspondent raises and he admitted that there was no reason why Dr. Smith should not have heard the noise of the motor even though it were travelling at the speed of sound. He asked us however to allow the error to remain to see whether our readers were acute enough to catch it. Apparently Mr. Dunning was quite wide awake.

Our correspondent's answer to the fundamental error in "Trapped in the Depths" was also correct. We can appreciate the keen enjoyment that must be Mr. Dunning's in not only reading and being thrilled by our stories but also in trying to puzzle out their meaning and truth.—*Editor.*)

The Finest Story

Editor, WONDER STORIES:

When first you entered the field of science fiction you wrote a number of very excellent stories for the magazine you edited. I am sure a large majority of our readers would enjoy seeing stories from your pen in print. Now that that is off my chest, let me comment on the May issue.

The "City of the Living Dead" is the finest story I have ever read in any science fiction magazine. It is logical, smoothly written and has an original theme which is not often found in most stories.

The combining of AIR WONDER and SCIENCE WONDER has not been an immense improvement to me. After all the promises of an AIR WONDER QUARTERLY we will have none. Before we had twice as many stories to read, now we have but half.

In the heated discussion as to who is your best author, I think Dr. D. H. Keller is, but Mr. Gernsback, you can bely that statement!

Arthur Berkowitz,
768 Beck St.,
New York, N. Y.

(The "City of the Living Dead" was in our opinion a marvelous story. Its authors Messrs. Pratt and Manning are men from whom we expect much. They have every capability to carry them to the front rank of science fiction authors.

We regret that we have deprived our reader of half of his reading matter in science fiction. But in AMAZING DETECTIVE TALES he will find science fiction in another and fascinating form—science used by criminals to perpetrate dastardly crimes; and scientific detectives trailing them down by the most astounding ingenuity. We hope that this magazine will amply make up for the loss of AIR WONDER STORIES.—*Editor.*)

BOOK REVIEWS

MODERN SCIENCE—A General Introduction, by J. Arthur Thomson, M.A., LL.D. 370 pages, illustrated, stiff cloth covers, size 5½ x 8½. Published by G. P. Putnam's Sons, New York. Price, $3.50.

Professor Thomson, the author of the *Outline of Science*, gives us now a new viewpoint on the nature of the physical world we live in. He starts with a description of the formation of our solar system in great space from the disintegration of a spiral nebula and sketches the conditions creating life on our planet. He carries his reader then by gradual stages down to the civilization and the world of today. The formation of the earth's surface, the structure and properties of matter, both inanimate and living; the nature of radiant energy, are all explained with a minimum of technical obscurities. Professor Thomson's method is the graphic presentation of facts so that they not only explain but illumine the mine.

The diagrams Professor Thomson presents us with are quite fascinating, and serve to clear up many of the confusions about things and places that usually oppress the lay mind. This book is enthusiastically recommended for the reference of the general reader and the science student as a broad survey of the forces that have created the world we live in and know today.

THE GREAT ASTRONOMERS, by Henry Smith Williams. 640 pages, 150 illustrations, stiff cloth covers, size 6½ x 9½. Published by Simon and Schuster, New York. Price, $6.00.

Dr. Williams, as the publishers tell us, is the author of over 100 volumes of books on history, art and science. The present volume is his 101st.

Starting with a description of primitive astrology the author tells the story of the early (and accurate) measurement of the world by the Alexandrian astronomers.

Most thrilling of all is the astronomical drama since the Renaissance: the stupendous transformation in man's conception of the world, from the idea of a vast all-essential central earth with torches, lanterns and sparks to form the Heavens, to the present-day understanding of the Heavens as a perhaps infinite series of Universes, peopled by millions of gigantic Suns.

Through these fascinating pages, fully illustrated with photographs, maps and diagrams, move the owners of the most fortunate eyes that ever watched a star: Pythagoras, Aristarchus, Ptolemy, Copernicus, Kepler, Herschel, Laplace, Bessel, Frauenhofer, Pickering, Chamberlain, Moulton, Shapley, Michelson, Einstein, Millikan, Eddington, and Jeans—a brilliant com-

(*Continued on page 286*)

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By Otfried von Hanstein

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This story has been translated by us and published in its entirety in the QUARTERLY. It is vastly different from anything that has ever been published in the annals of science fiction—it will cause a tremendous sensation.

This talented German writer has condensed into this story sufficient material to easily fill half a dozen ordinary novels of first-class science fiction. Radium, Air Transportation, Weather Control, World Automatons and dozens of other inventions fairly tumble over each other throughout the thrilling pages of this remarkable book.

Incidentally there is nothing contained within this story that is not strictly possible and within the bounds of future science.

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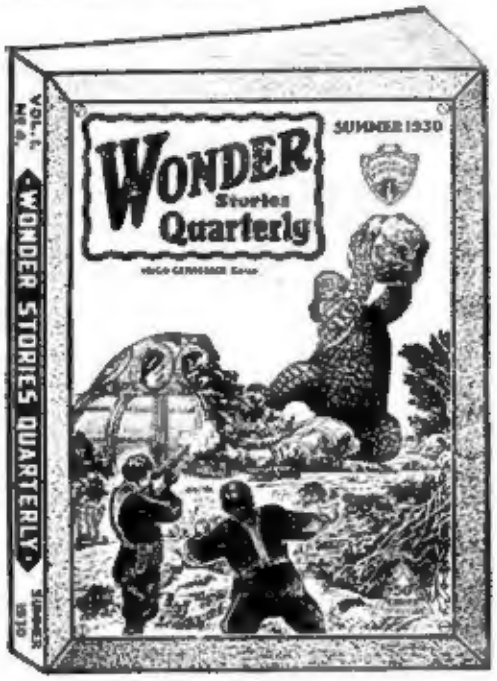

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Other Stories in This Issue

THE WAR OF THE PLANETS
By R. H. Romans

THE TOWER OF EVIL
By Nat Schachner and Arthur L. Zagat

THE MONSTERS OF NEPTUNE
By Henrik Dahl Juve

THE ETERNAL MAN REVIVES
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BOOK REVIEWS

(*Continued from page 285*)

pany of those for whom one world is never enough.

This book is primarily an *interpretation*, by an eminent scholar, of that enormous mass of facts and theories which together make up the science of Astronomy. The attempt has been made throughout to translate even the most recondite researches into untechnical and *imaginative* prose; yet at no point has there been the slightest concession in the form of undue "popularization." *The Great Astronomers* is an exciting excursion into the infinite, but it remains a substantial and authoritative work, indispensable to any modern man or woman who is curious about the world we live in, and its relation to those that we do not live in.

NEW FRONTIERS OF PHYSICS, by Paul D. Heyl, Ph.D. 170 pages, stiff cloth covers, illustrated, size 5 by 8. Published by D. Appleton & Co., New York. Price, $2.00.

This volume is part of the Appleton New World of Science Series. Its author is a physicist of the U. S. Bureau of Standards and the author of "The Common Sense of the Theory of Relativity." Dr. Heyl has set himself the task of presenting the meaning of the recent physical discoveries and theories as to the nature of matter. There is no doubt but that we are on the brink of epoch making discoveries in physics—some of which may radically affect our whole conception of the universe.

The present volume is written for the lay reader—which after all is quite a task, for the concepts involved are both abstruse and involved. But marking out a clearly-cut path for himself through the maze of mathematical symbols, Dr. Heyl succeeds in making an interesting and absorbing story of what is happening behind the scenes in physics.

An Error

In the June issue *The Stars, How and Where They Influence* and in the July issue *The Earth in the Heavens*, both by L. Edward Johndro, were reviewed and the price was stated at $1.00 each. We wish to correct this error. The price of the former book is $2.50 and that of the latter is $3.00.

MENTAL RADIO, by Upton Sinclair. 239 pages, illustrated, stiff cloth covers, size 5¼ x 8½. Published by Albert and Charles Boni, New York. Price, $3.00.

Upton Sinclair, noted as a social reformer, now turns his attentions to the field of clairvoyance, psychic research and mental telepathy. He has recorded here the experiences of himself and his wife, Mary Craig Sinclair, for whom he claims those psychic qualities that make clairvoyance possible.

Sinclair records a number of experiments carried out between himself and his wife. In one set his wife would reproduce on a piece of paper a drawing that Sinclair had made in another room. William McDougall, the noted psychologist, in a preface to this book, although keeping the open mind with regard to questions of mind reading and telepathy, prefers to doubt that phenomena such as this can occur. The translation of the writing of one person to the mental image of another, he states, cannot occur.

However, that difficulty can be overcome by imagining that the medium (Mrs. Sinclair in this case) does not really see what has been written but what the writer has in his mind. That reduces the case to a simple one of mind reading.

The book is simply written and has a convincing air. And as Professor McDougall states so well, whatever contributions we have to the study of the unexplored sections of the brain and its queer powers, we must be grateful for. And whether we can believe or not the experiments that Mr. Sinclair records we must admit that they have the air of probability.

Classified Advertisements

Advertisements in this section are inserted at the cost of ten cents per word for each insertion—name, initial and address each count as one word. Cash should accompany all classified advertisements unless placed by a recognized advertising agency. No less than ten words are accepted. Advertising for the September 1930 issue should be received not later than July 7th.

BOOKS

ALL SCIENCES, reference work desired. Agency for works treating on the obvious infinities of the universe. F. L. Jones, Gen. P. O. Box 198, New York.

CHEMICALS

BOOKLET OF EXPERIMENTS and chemical catalog, 15c. General Chemical Company, Box 397, Reading, Pa.

DETECTIVES

DETECTIVES Earn Big Money. Excellent opportunity. Experience unnecessary. Particulars Free. Write, George Wagner, 2190-B Broadway, N. Y.

INSTRUCTION

LEARN TATTOOING. Instruction catalog, dime. Miller, X431 Main, Norfolk, Virginia.

MISCELLANEOUS

TO THE MAN OR WOMAN seeking correspondence, matrimony or pen pals, we offer entirely different service. Box 1540, Sta. C, Los Angeles, California.

OLD MONEY WANTED

$5 to $500 EACH paid for Old Coins. Keep ALL old money. Many VERY valuable. Get Posted. Send 10c. for Illustrated Coin Value Book, 4x6. Guaranteed Prices. We buy and sell. COIN EXCHANGE, Room 10, Le Roy, N. Y.

PHOTOGRAPHY

SEND ME 40c. and negative and receive by return mail beautiful 8x10 glossy finish enlargement. Other photographic work at lowest prices. Send for circular to Charles, 210 Chestnut St., Camden, N. J.

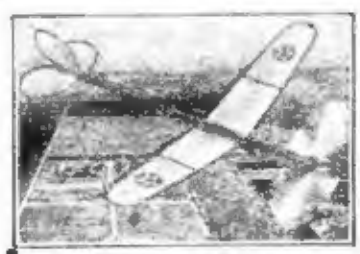
SONG POEM WRITERS

SONG POEM WRITERS—"Real proposition. Hibbeler, D189X, 2104 Keystone, Chicago.

Become a Reporter!

Thousands of opportunities for young men to enter the Newspaper field. Fascinating work. You will meet interesting people; interview celebrities. A famous New York reporter with twenty years of practical experience has written a whole course of journalism and reporting in six easy lessons. He shows you the short-cut to success. He tells you what to do and what not to do, to become a successful reporter. Send today for the "PRACTICAL COURSE IN JOURNALISM," by Henry John Brockmeyer of *The New York Evening Post*. Just drop us a Postal Card—no need to send money. We will mail you the whole set of six books and you pay the Postman $3.00 plus a few cents for postage. No more to pay. Money absolutely refunded if not satisfied.

PRESS GUILD
16 E. Murray Street, New York.



Sensational! The METEOR FLIES 3,000 FEET! ONLY $2.50

Thrilling 3000-foot flight! Loop the loop, barrel rolls, circular flights, etc. Finest and longest flying model ever made. Light, sturdy construction permits exciting, record-breaking flights impossible with heavy models. Spread 28". KNOCKED DOWN—easy to assemble—all materials and instructions furnished. No tools needed—$2.50. ASSEMBLED READY TO FLY—beautifully decorated in yellow and red—$3.75. SEND NO MONEY! Just order METEOR today. Pay postman upon delivery.

SATISFACTION GUARANTEED

KAHN AIRCRAFT COMPANY
6710 Woodlawn Ave. Dept. 17 Chicago, Illinois

Afraid to face the TRUTH About Himself!

What most men would hear if their mirrors could talk

HIS own conscience **TELLS HIM** how miserably he has fallen below what others had expected of him—and what he had **DREAMED** for himself

If a mirror reflecting his daily life could **TALK** it would say, "You're **BOUND** to stay in a rut. You are **SCATTER-BRAINED** and **GRASSHOPPER-MINDED**. You nibble at everything and master nothing! Your thoughts are always **HAZY** and you can't **THINK THINGS THROUGH**. You just **DAY DREAM** and hope you will get 'some lucky break' And, deep in your heart, you **KNOW** that these **ARE** your faults. That's why you're **TIMID** and self-conscious—afraid of your **JOB**, of your **ABILITY**, of your **JUDGMENT**, of your **FUTURE**!"

At a **SHOW-DOWN** like this the "**BIG**" man **FACES** the truth, and **DOES SOMETHING** about it.

But the "**LITTLE**" man **TURNS HIS BACK** on his shortcomings, **FINDS EXCUSES**, and **DOES NOTHING**.

A certain task finds him **LACKING IN THE PERSISTENCE** to carry it through. So he says that his employers "want too much work for what they pay me!"

A splendid opportunity **FINDS HIM UNPREPARED**, and another seizes it. Then he says "some fellows get all the breaks!"

Some circumstance shows up his utter **LACK OF PURPOSE IN LIFE** (so plainly that even **HE** cannot escape admitting it). So he **COOKS UP AN ALIBI** about having been "unable to go to college!"

You don't need to be told that this "**LITTLE**" man fills a "**LITTLE**" job—is paid a **SMALL** salary—and has **INSIGNIFICANT** future prospects. These are the rewards of **THE MAN WHO FOOLS HIMSELF**!

But this man's **REAL TRAGEDY** is that he is almost always a fellow of great promise and fine **POSSIBILITIES**!

If he would only use his ingenuity in **FINDING OUT** what's wrong with himself, instead of **WASTING** it in **ACCOUNTING FOR HIS FAILURES**—he would soon discover that he has the makings of a "**BIG MAN**!"

What is the one important difference between "the Failure" and "the Success"? It is this priceless ability that "the Success" has of **FACING** his mental **HANDICAPS** and replacing them with definite mental **ADVANTAGES**.

You know by instinct that this is **AS TRUE AS GOSPEL**. And you can **PROVE** it right now in **YOUR OWN CASE** by what you **DO** about sending for a remarkable free book called "Scientific Mind Training."

It is the story of the world-sweep of Pelmanism. It shows in fascinating detail how Pelmanism has helped over 700,000 men and women to **FIND THEMSELVES**.

Before these people learned about Pelmanism they were using only the **ONE-TENTH OF THEIR MENTAL POWERS THAT THE AVERAGE MAN USES**. (This is a scientific fact—vouched for by the world's foremost psychologists.) The other **NINE-TENTHS** remained **ASLEEP—DORMANT—UNAROUSED**!

This great reserve of mental power, almost wholly lost by the average person, is capable of making his life more **SUCCESSFUL, HAPPIER, MORE SIGNIFICANT**. Right within the mind of the average person is contained the ability to **ACCOMPLISH** his aims—whenever a **GREATER PERCENTAGE** of his latent but unused mental power is **HARNESSED** and directed through scientific mind training. Any person who wishes to **DO** more, to **HAVE** more, and to **BE** more, must put into his life a **PRACTICAL PLAN** to bring together the natural powers he already has, strengthen them, and **PUT THEM TO WORK**.

To over 700,000 people in all parts of the world **PELMANISM** has been this **POSITIVE SYSTEM**. For thirty years, in almost all lands and languages, it has been **HELPING MEN AND WOMEN** answer this world-wide **URGE TO GO FORWARD**.

Men like Edgar Wallace, the famous mystery-story writer; Sir Herbert Austin, manufacturer of the "Austin" car; General Sir Robert Baden-Powell, founder of the Boy Scout movement; Sir Harry Lauder; Prince Charles of Sweden; Frank P. Walsh, former Chairman of the National War Labor Board, and hundreds equally famous, praise this method of increasing brain power.

Through Pelmanism **YOU** can bring into being **YOUR OWN** unsuspected self—in full **COMMAND** of the powers and accomplishments **HIDDEN** within you, waiting to be developed.

Spend 2c **TODAY** for a postage stamp. Send in the coupon below for a copy of "Scientific Mind Training." There is no further obligation whatever. You need not spend another penny.

You have only **TWO CENTS** to lose by writing for your copy. You may **GAIN** success, peace of mind, happiness, independence!

Thousands who read this announcement will **DO NOTHING WHATEVER** about it. The little effort and the will needed to send for this book—which is **FREE**—will be "**JUST TOO MUCH**" **FOR THEM**! How can these people **EVER** gain what they hope for, dream about? They are the skeptics, the doubters, the "show me" wiseacres.

The thousands who are open-minded—who are willing to learn something to their advantage—will **ACT** on their impulse to send in the coupon. They will be **COURAGEOUS** enough to **FACE THE TRUTH** about themselves. They will **WANT** to find out what's **HOLDING THEM BACK**—will want to **DO SOMETHING ABOUT IT**. Such people will find it **IMPOSSIBLE** to put a 2c stamp to greater use than **MAILING THE COUPON BELOW**. If you are one of them, mail this coupon **TODAY**.

THE PELMAN INSTITUTE OF AMERICA

71 West 45th Street Suite 2310 New York City

The Pelman Institute of America,
Suite 2310, 71 West 45th Street, New York City.

I want you to show me what Pelmanism has actually done for over 700,000 people. Please send me your free book, "Scientific Mind Training." This places me under no obligation whatever, and no representative will call upon me

Name _____

Address _____

City _____ State _____

YOU'LL NEVER KNOW LIFE

Until You've Read the Greatest of All Forbidden Books!

YOU'LL never know the tremendous force of human passion — you'll never understand life in the raw, stripped of artificial conventions and hypocrisies, until you've feasted on the most thrilling Tales from that greatest of all true-to-life books—the immortal Decameron.

Here in the frankest, most revealing tales of love and intrigue ever written, are situations so startling, so true to life, that we feel they might be happening today instead of centuries ago. Written in an age of plain speaking, they show us how real flesh and blood men and women act—the deep secret motives that influence our actions today no less than they did centuries ago.

And now for a short time only you can inspect these great examples of realistic writing—the stories which you have always longed to read—in your own home for five days, without obligation! Read all about this amazing offer, then send for your copy at once.

For centuries the Decameron has thrilled millions—has inspired countless great authors—has been lauded by the most discriminating critics. Rich in fascinating plots, vibrant with all the passions of the race, it has furnished forth plots for the world's greatest masters of literature — Shakespeare, Chaucer, Keats, Tennyson, Dryden and Longfellow. A large volume would be required to list the writers who have copied or adapted some of the plots. Hardly a great novel, or a poor one, exists, in which the plot is not in part or in whole taken from the Decameron. No one can know literature, can call himself truly sophisticated, truly a master of life in all its infinite variety, until he has drunk from the bottomless loving cup of that genial old Italian, Giovanni Boccaccio.

THESE GREAT WRITERS HAVE TAKEN PLOTS FROM THE DECAMERON

Shakespeare took parts of *The Merchant of Venice*, *Cymbeline*, *All's Well That Ends Well* and *Romeo and Juliet* from these stories. Lessing took the plot of *Nathan der Weise*, Chaucer the idea of his *Canterbury Tales*, Dryden, Keats, Longfellow and Tennyson wrote poems—all based on these great tales, which have outlived thousands of manuscripts written since their day.

Between the covers of these Tales from the Decameron you will find life itself — real, pulsating passionate life that refuses to be confined by paralyzing restrictions—life that refuses to follow the dictates of prudery. Far from being immoral, as many narrow-minded people used to think these Tales from the Decameron are in reality almost a text book for the earnest student of that greatest of all studies—human nature.

Boccaccio's stories have already lived five times as long as our United States—over twenty-four generations. They were the "best sellers" when gunpowder was scarcely known — and yet today they still delight us, still give us pleasure and instruction, with their immortal vitality, forever young, forever gay, forever thrilling. If you like to read a story of adventure, read one of these. If you want a charming love story, read another. If you look for tragedy, read a third, the fourth will make you weep.

The morals and customs of Italy of the fourteenth century are laid before you—the way people lived, the hovels and palaces they dwelt in, their methods of travel—all are told with a wit and pathos that never crept between the covers of any book penned by a historian. Thus the stories not only amuse and entertain, which after all is the first requirement of good fiction, but they give us the history of the manners and customs and morals of a long passed age. They constitute a landmark of literature, which must not be passed over, if you would broaden your vision—make yourself truly cultured.

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5-DAY TRIAL.

And now we are enabled to offer you these great classics—thirty-five of the best stories from the famous Decameron for the amazingly low sum of only $1.98. Send no money—just fill out and mail the coupon below. When the package arrives pay the postman $1.98, plus few cents postage. Inspect this great book for five days, then if you are not delighted return it and your money will be refunded. Mail the coupon this instant before this low price offer is withdrawn!

FRANKLIN PUBLISHING COMPANY
Dept. L-1040
800 N. Clark St., Chicago, Ill.

Franklin Publishing Co.,
800 N. Clark St., Dept. L-1040
Chicago, Ill.

Please send me a copy of The Tales from the immortal Decameron by Boccaccio. When package arrives I will pay postman only $1.98 plus few cents postage. If not delighted I am at liberty to return the volume within five days and my money will be refunded.

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City .....State .....

If you may be out when the postman calls, enclose $2 with this coupon and we will pay all delivery charges. Customers outside U. S. must send cash with order.